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July 1917



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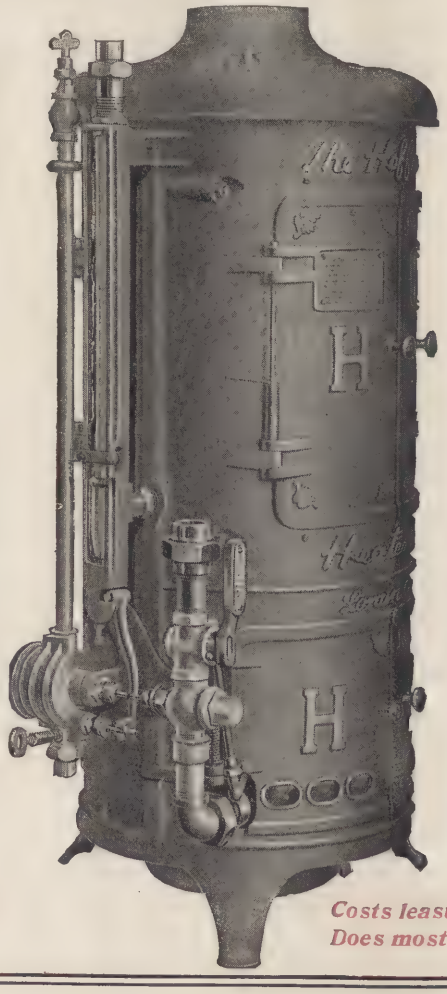
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POND GARDEN—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.

THE ARCHITECTVRAL RECORD

VOLVME XLII NVMBER I

JVLY, 1917

PEACOCK POINT

THE RESIDENCE OF HENRY P DAVISON, ESQ. LOCVST VALLEY ~ LONG ISLAND WALKER & GILLETTE, ARCHITECTS

By

John Taylor Boyd, Jr

THE publication of a new work by Messrs. Walker and Gillette is a matter of interest among architects. There is a keynote of excellence running through the design of all the product of the firm that at times rises above the level of professional skill. When this happens the result is a masterly work of art. Such is the house of H. H. Rogers, at Southampton, Long Island, which I described last year in the January number of the Architectural Record. The "Rogers house," as it has come to be known, called forth at once admiration for the rare way in which it combined imagination and boldness with vigorous classic unity of effect; for its harmony of color and its perfection of detail, especially in the matter of texture. Remarkable as this house was on the exterior, with its flat-walled gardens, inside it was to be praised for the free, unconventional use of materials, of plaster and metals and tile, used in decorative schemes obtained by contrasting pieces of furniture, furnishings and objects of art against flat wall surfaces of exquisite texture, all in rich, strong, yet harmonious color.

A decidedly different type of house is Peacock Point. Indeed, at first sight one would hardly believe that it came from the same hands that wrought the Rogers house—that is, until one notes the striking, decorative quality of the terrace front shown on page 7, and the sureness of proportions common to the two. Inside, also, if one is familiar with the Rogers house, one will appreciate in Peacock Point something of the same ability to devise contrasts of spots of rich concentrated ornament in glowing colors against bare flat planes. Especially is this true of the breakfast room, page 14.

It is evident that Peacock Point is a much more conventional type of house than the other, doubtless necessarily so, since the latter is a summer residence

and might, therefore, assume a more original character than an owner would desire in a year-round home, where medieval oak and tapestry, wrought iron and tile might become tiresome at times, especially in winter.

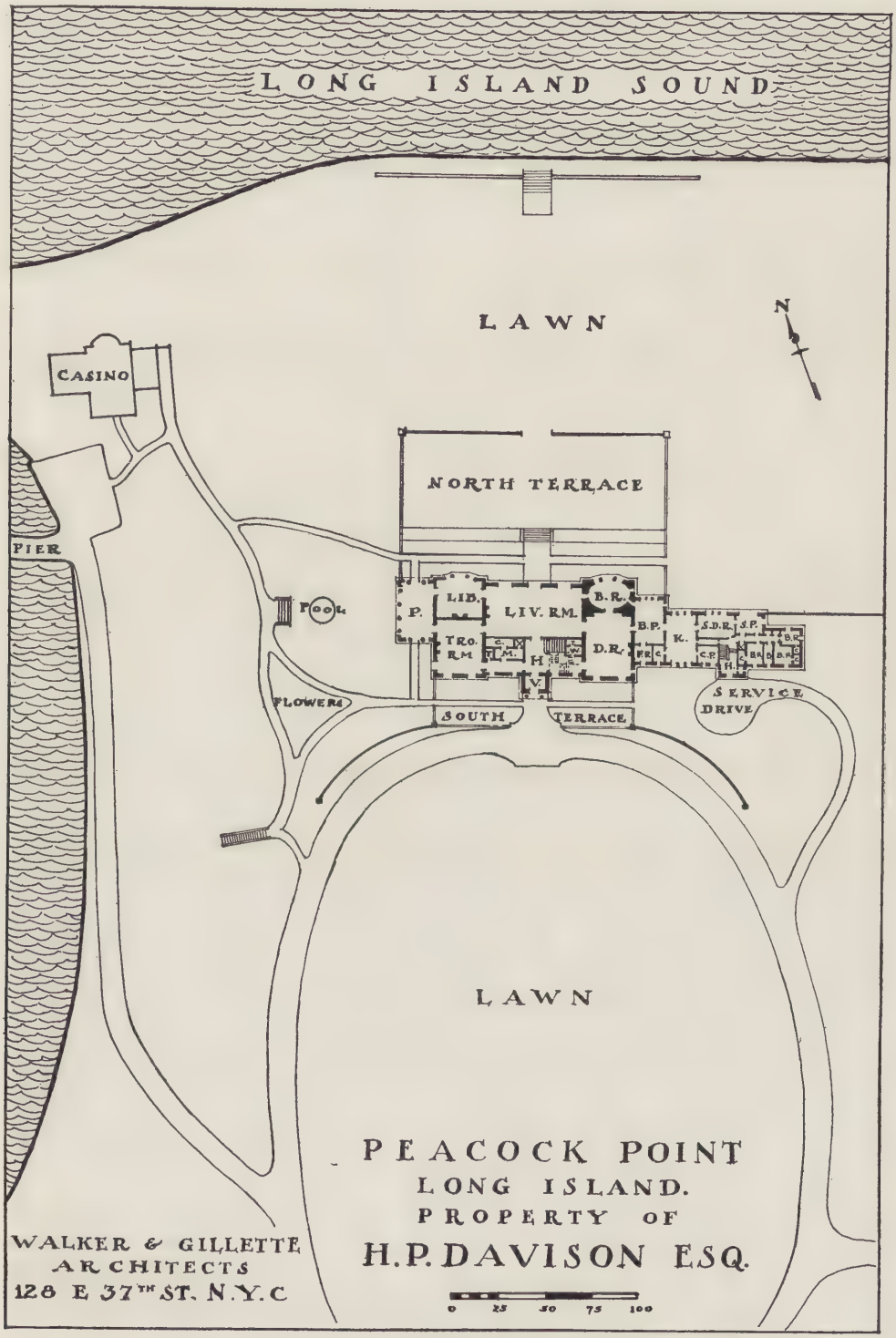
Exteriorally, Peacock Point follows a type familiar to us. That is the type which has been evolved by two different lines of thought converging towards the same goal, the goal of formal architecture on balanced axes, expressed with fine proportions and in exquisite taste. These two differing influences originated a generation ago with the late Mr. McKim and with Mr. Charles A. Platt. Both of them were men of strong personality, and they succeeded in imparting to their work an extraordinary expression of well-being and good breeding carried out in perfect taste. Indeed, if one comes to think about it, one will be astonished that two such people could say the same thing in such different words. 'Tis like reciting the Lord's Prayer, first in English and then in Russian. Only two such strong personalities could have accomplished this paradox. The two architects possessed in rare degree the true classic spirit, which is: formality without monotony, perfection without coldness or deadness. They knew how to retain interest, yet at the same time ruthlessly cut away every motive or ornament not absolutely vital to the design. They often endowed their work with qualities of charm and grace, which is but another attribute of true classicism. Altogether, it is doubtful if there ever has been evolved a formal style of architecture more suited to the needs and character of gentlemen of large means and of ample endowment in the material and intellectual benefits of twentieth century civilization. More recently, this modern American adaptation of Georgian has evolved further, under the influences of younger men, among whom are Messrs. Walker and Gillette. It has become freer, slightly less severe, and grace and delicate scale have often been added to it. This modification has perhaps been the result both of intimate study of beautiful details in Italy, and also of the variety and perfection of early American work, of whose fascination we never tire.

All these influences are apparent in Peacock Point. But it shows clearly the same bold, keen sense of decoration so characteristic of its creators. The decorative character of the terrace front has, however, a sounder basis than any architect's temperament, or any yearning for pretentiousness on the part of an owner desirous of something striking to advertise him to a public flashing past his door in automobiles. The true reason for the strong color spotting of the pilasters and flanking bay-windows in the side pavilions is to provide a motive powerful enough to carry across the waters of Long Island Sound. The house stands only some 250 feet from the shore line, and did it not have such strong contrasts of color would appear at a distance as a flat, dark mass without any architectural character whatever.

As an additional effective aid in providing a long-distance impression, we must admire the splendid silhouette of the house. Its manner of piling up from the ground in a pyramid, up from ground floor bay-windows, then to flanking loggia and service wing, on up to the flat-roofed balustraded pavilions of the second story and finally to the third floor attic crowned by its hipped roof—all this cannot be too highly praised. Not only does this stepping up improve the aspect of the house at a distance, but it further harmonizes the house with its level site, in which effect the terrace and the skillfully disposed planting serve to aid.

The successful tieing-on of the flanking pavilions to the centre motive is a skillful bit of technique, and I do not recall anywhere having seen a better solution of the hard problem of stopping the frieze and architrave of the entablature above the pilasters and columns and then carrying only the cornice around the building above the plain walls. In the previous number of the Architectural Record several instances of this device were seen in the George Peabody College for Teachers.

On this sea-front the order has been detailed with admirable freedom, especially with regard to the narrow entabla-



GROUND PLAN—PEACOCK POINT, THE RESIDENCE OF H. P. DAVISON, ESQ., LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



MAIN ENTRANCE—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



PEACOCK POINT, LOCUST VALLEY, L. I.
WALKER & GILLETTE, ARCHITECTS.



WEST PORCH—PEACOCK POINT, LOCUST VALLEY,
L. I. WALKER & GILLETTE, ARCHITECTS.



VIEW FROM NORTHWEST—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.

ture above the elongated capitals and the flattened vases set above the cornice. In its decorative motifs and delicate scale it has the inspiration of colonial America, though we cannot recall anything exactly resembling it in our early native masterpieces. Another virtue of the exterior of Peacock Point is that, while invested with unusual refinement and delicacy, the underlying proportions of windows and window enframements and balustrades retain that splendid solidity and sureness that the progenitors of this style of house endowed it with. Too often we notice the recent tendency of over-refinement, where delicacy and thinness—qualities in themselves desirable in certain cases—have not been successful and have instead made designs look weak, even effeminate. The truth is that when delicate, attenuated proportions are chosen, the designer must detail them with corresponding delicacy, with extreme subtlety. Refined subtle proportions demand even more than do heavier ones strength and firmness and character in every line. The difference of a small fraction of an inch in belt-course or capital, or frieze, or overhang or projection, may decide success and failure of the work of art. It is no exaggeration to say that attenuated proportions require higher ability in their designs than heavy ones, though, of course, they have no superiority in themselves over heavy ones. Many cases there are where heavy proportions are to be preferred to light ones, and just as much ability may be imparted to their details. The point is that if the heavy order has not unusual artistic accuracy in its design, it does not appear to have failed so signally.

As minor details will be noticed the lively touch of decoration of the metal balcony, lace-like against the dark brick, the finely turned balusters, columns and arches, also the humorous placing of the big peacocks over the bay-windows, symbolical of the name of the estate.

The south or entrance front is of simpler, quieter aspect than the other, since in a garden front there is no need of affording a long distance impression. Its good taste is evident, resulting in less emphasis of pyramidal effect, though the silhouette is the same. The sparkling touches of color, of style, provided by the enframements of the first story, the big fine motive of the entrance, and the able handling of the balustraded terrace which ends against the urn-tipped posts of the circling walls and serves to aid the adjustment of building to flat terrain, these are the main elements of the success of this front. It is fortunate, too, that advantage has been taken of the position of the tall elms on the lawn to break up the horizontal lines of the cornice. As the photographs show, the roadway swings up to the entrance door around a long elliptical lawn of elm trees. At the west of the opposite end of this lawn is the entrance, where a gateway of curving walls has overcome ingeniously the oblique turning off from the highway. The gardens open out from the house terrace on the east, and, further along, are found a polo field and the farm of the estate. The photographs are worth much study for the effective planting, which is plentiful but not dense enough to appear gloomy. The designers have avoided mechanical or trivial effects in the gardens. Instead they contented themselves with a less formal method, have sought bold sweeping effects made by contrasting big beds of flowers against banks of trees and broad greensward paths, and have brightened the perspectives with an occasional spot of architecture in the curving curb of a pool, an infrequent statue or thatched teahouse. It is precisely the scheme of decoration of the garden front of the house. Good use has been made of rough stone walls and paths made by great flagstones set in greensward. Altogether the effect is somewhat naturalistic, akin to old-fashioned places, with just enough of modern style and art to make it cheerful. How often do we see the contrary where gardens are hard, mechanical, fussy, with a surfeit of angular brick walls, countless little paths and steps and levels all washed spick and span and without sufficient background of shrubs and trees! The old Italian and English gardeners knew their work. They were aware that delicacy and color in nature are provided by leaves and flowers and sunlight, and that



WESTERLY END—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



ENTRANCE HALL—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



LIVING ROOM—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



BREAKFAST ROOM—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



DINING ROOM—PEACOCK POINT, LOCUST VALLEY, L. I. WALKER & GILLETTE, ARCHITECTS.



LIBRARY—PEACOCK POINT, LOCUST VALLEY,
L. I. WALKER & GILLETTE, ARCHITECTS.

the right contrast comes when architecture of walls and terraces is made heavy and lumpy with blocks of stone with robust overhangs or rustications affording deep shadows. The extravagant use of rococo elements in garden architecture of the Renaissance was not caprice, it was more than blindly following the tastes of the time. We can hardly swallow such oddities now and would not care for them today in buildings, but in gardens they have a purpose. In Italy and England one will note that, however delicate may be the scale of buildings on the parts off the ground, the architecture in contact with foliage near the ground on the same building is coarse and heavy. Yet, more often than not, American architects will set mechanical, sophisticated prim little gates or posts or other garden decoration in the midst of a garden.

By this time we are all familiar enough with symmetrical plans of houses with centre entrances and consequently we do not need to have their intricacies pointed out to us. A glance at page 14 will be sufficient to recognize a highly capable arrangement with the proper touch of diversity from rectangular shapes added by the elliptical breakfast room. The entrance is agreeable—into a biscuit-colored hall with wrought iron stair railing and brass hand rail, whose chief merits are the old Portland stone floor brought from England and the Chinese panels in full color on the second floor. In the dining room we have much more elaboration, even sophistication, executed with great delicacy of detail. Here the color scheme shows soft yellow walls as a background for walnut furniture and blue carpet and the crystal candelabra over the mantel. Again the symbolical peacock appears, this time as a screen in front of the "Franklin" on the hearth. We are no longer content to associate crickets with the hearth—we must place peacocks there. In what countless ways, in even the minutest, the oddest, the most humorous details, is the old truth always recurring that architecture is the mirror of the life of its time!

I have mentioned the charming breakfast room and its fine decorative flower reliefs. These were developed from old Dutch flower pictures in a sort of "composition" material, and executed in full color. A happy idea, which, let us hope, will not be done to death by careless imitation. On the chairs of this room are painted plaques of birds of the locality.

On page 16 appears a view of the library, a most homelike room. Its walls are tinted a fawn gray and the cornice is painted in color blending into a most charming interior with objects of different arts and periods vivaciously combined. Its only fault is a slight tendency of that curious fad of contemporary decorators which is to balance all tiny pictures, medallions and other trinkets painfully on an axis, especially a piece of furniture. The *reductio ad absurdum* of this logic I once saw in a published photograph of a simple chest of drawers, which was presented as an example to be followed. Here the decorator in some uncanny way had disposed tall candles and framed photographs and books, especially books, until he had changed that humble chest of drawers into a shrine or an altar. Were the owner of the bedroom a religious man, it is certain that he could never enter or leave the room without kneeling and crossing himself before the ikon. The decorator's art has advanced rapidly in the last ten years and all must be glad of its progress. It has taken a great load off the architect's mind, for now he may design good interiors, conscious that there is a good chance that they will not be ruined by bad furniture and hangings. For this reason it is a misfortune when we discover in the decorator's art any tendency to degenerate into formulæ and fads. In too many cases interior decorating is more of a business venture than a profession, and, under the commercial pressure of increasing the volume of sales, is too easily tempted into a routine like this ridiculous overemphasis of symmetry in tiny things.

A work wrought with insight in conception and details, executed with high skill and breeding, in a fine vigorous scale, well harmonized with its setting, Peacock Point is a worthy addition to America's ever lengthening list of fine houses.



HALL OF ARCHEOLOGY—THE SOUTHWEST MUSEUM, LOS ANGELES, CAL. SUMNER HUNT & S. R. BURNS, ARCHITECTS.

The SOUTHWEST MUSEUM LOS ANGELES, CAL. ~

SUMNER HUNT & S.R BURNS, *Architects*



By

Richard F Bach



A LAND so widespread as ours necessarily encourages diverse development—that is, regional manifestations of growth—each of which, though contributing liberally toward the parent or national stem, nevertheless maintains its own individual physiognomy definitely recognizable as to form, strongly influential as to character.

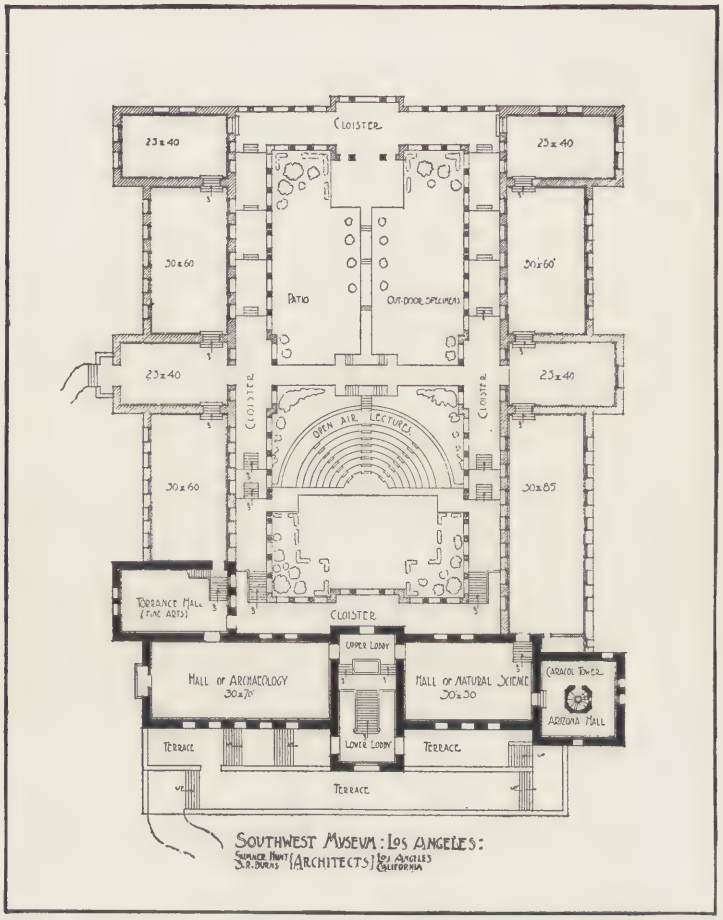
Before American traditions were established as those of white men reflecting Europe, adopting European manners of art and modes of thought, and finally, with the feeling of independence and the consciousness of power, casting aside European forms except as a parallel inspiration—in short, before we achieved a national responsibility in its deeper significance, the greatest diversity had long existed among the aboriginal inhabitants, a diversity due to enormous distances, to lack of easy intercommunication, and the need of following the game to its own changing ranges.

The white man's development on the same soil has to a degree inherited the same diversity of character or regional quality with regard to his art. A comparison of country houses of New York and California, of Louisiana and Illinois, will immediately substantiate this contention. It is, therefore, not at all remarkable that when the white man begins to study the characteristics of the first inhabitants of the soil, their regional qualities are impressed at once upon his mind, and when he gives such study a concrete home in the museum, he can freely follow a local architectural inspiration.

In the East our natural history museums have long been active in bringing together material illustrative of the life and habits of the aborigines of the land. We have but to note the large collections to be found in the Museum of Natural History in New York and other large cities, not to mention the fine Museum of the American Indian now being erected through the munificent Weyhe Foundation in New York City as part of the classic group at 156th Street, which already includes the Hispanic Society of America, the Numismatic Society and the American Geographic Society buildings, and the Spanish church of Nuestra Señora della Esperanza. But the Eastern museums fell under the sway of the general stylistic progress of architecture and the majority of tribes, material evidences of whose life could be shown, were nomads in such degree that wigwam, house and teepee were their most permanent structures and these, obviously, held forth but little architectural suggestion.

In the Southwest, however, appears the less temporary building type of the Navajo, the Hopi and other tribes, the square or oblong house of adobe which came to have a distinct architectural character, since repeatedly made use of in residences and other buildings in that region. Excellent examples are to be found, above all, in Sante Fé, New Mexico, where the adobe type as a residential possibility has been logically developed, and where the possibilities of the material for a museum of Southwestern antiquities and art have been well exemplified.

But in addition the Southwest also produced—or, with Mexico, assisted in producing—the so-called Mission style, a manner almost as aboriginal as that of the Indians themselves, and, all told, about the most autochthonous development fathered by white men in this country. This style of blocky masses, of adobe, of cement, of stucco and dark heavy timbers, the whole relieved by



FLOOR PLAN—THE SOUTHWEST MUSEUM, LOS ANGELES, CAL. SUMNER HUNT & S. R. BURNS, ARCHITECTS.



THE SOUTHWEST MUSEUM, LOS ANGELES, CAL.
Sumner Hunt & S. R. Burns, Architects.

highly colored tiles and paint and modeled plaster, in its essentials—and excluding its decorative details—closely allied to the rudimentary manners of the Indians among whom its builders sought to proselyte. It is, therefore, not illogical to expect the two to be brought together in modern buildings, and it is more gratifying, in a sense, to witness their combination than to see the architectural manner of the Indian superseded as definitely as was his ownership of the land.

In the Southwest Museum herewith illustrated, situated at Los Angeles, the firm of Sumner Hunt and S. R. Burns of that city have well profited by the possibilities of such interpretations of local traditions, and their success in this building is but a parallel to that which they achieved in connection with the Temple of the Scottish Rite at Santa Fé, which we hope subsequently to reproduce in these pages.

The Southwest Museum is an institution devoted to the history of man on the Pacific coast, the archeology, science and art of the region, containing, in addition to its exhibition halls, educational research laboratories in archeology, botany, conchology, ornithology, entomology, and mineralogy; these laboratories are planned to serve in the nature of continuation schools for students who have finished their secondary schooling.

The site of the building is in accord with its purpose and character. It stands in the midst of a seventeen-acre tract, on an eminence commanding extended vistas of the picturesque country of tumbling sierras and broad sweeping valleys surrounding Los Angeles.

In exterior the building has been held within outlines of the utmost simplicity made necessary by its position. That simple silhouettes are best able to cope with the feasibility of such restraint was amply illustrated in the judgment displayed by the Greeks and even by the ancient Egyptians in the placing of isolated temple structures. The reduction of ornament to its most meagre proportions lays a further emphasis upon the block masses. The effect of the latter cannot of



TORRANCE HALL OF FINE ARTS—THE SOUTHWEST MUSEUM, LOS ANGELES, CAL.
Sumner Hunt & S. R. Burns, Architects.

course be fully rated now, since but one fourth of the buildings have been completed.

The completed portion will utimately form the entrance side of an oblong plan to be carried out as a patio subdivided at about half its depth, the subdivision being made necessary because of a sharp rise in ground toward the rear. This rise also encourages the planning of an open-air theatre, since the land contour provided a small natural amphitheatre. Following the patio suggestion a cloister is projected to surround both courtyards; the rear one of these will be terminated by an arcade or other cloister motive, forming a screen wall, rather than by a building unit, as is the case in other portions of the plan.

Parts of the building at present in use comprise the Hall of Archeology, measuring thirty feet by seventy feet; The Hall of Natural Sciences, measuring thirty feet by fifty feet; the entrance lobby, carried out in part as a projecting porch, but reaching through the entire depth of this wing; the Torrance Hall of Fine Arts, and the Caracol Tower.

The construction throughout is of reinforced concrete; walls, floors and roof of slab concrete, and the exterior roof covering is of red clay tiles.

Bearing in mind the material used, the results in the interior design have been well studied. Their present barrenness has yet, of course, to be relieved by appropriate decoration. Interesting effects of the structural material are seen in the large Hall of Archeology, a large interior, covered with an elliptical barrel vault, its window appearing as shallow penetration in the spring of the vault, skylights set into its crown and exhibition cases built in flush with the walls below.

The Torrance Hall of Fine Arts likewise extends through two stories, but is flat-roofed; an interior gallery surrounds a rectangular well which admits to the main floor its chief light from a larger skylight above.

At the opposite corner of the plan appears the Caracol Tower, which contains the nucleus of an excellent library



TORRANCE HALL OF FINE ARTS—THE SOUTHWEST MUSEUM,
LOS ANGELES, CAL. SUMNER HUNT & S. R. BURNS, ARCHITECTS.



MUNK LIBRARY, IN CARACOL TOWER—THE SOUTHWEST MUSEUM, LOS ANGELES, CAL. SUMNER HUNT & S. R. BURNS, ARCHITECTS.



HELICAL STAIRWAY IN CARACOL TOWER—THE SOUTHWEST MUSEUM, LOS ANGELES, CAL. SUMNER HUNT & S. R. BURNS, ARCHITECTS.

of Arizoniana arranged in the manner of a hollow square, the centre of which is occupied by a stair well, with an interior diameter of eight feet, and solid concrete walls. In this well rises through seven stories, with three mezzanine floors, a distance of about 125 feet, a helical stairway of concrete, built around a metal form, probably the only example of its kind in this country. The Caracol Tower itself is thirty-five feet square and stands upon a solid reinforced concrete slab three and one-half feet in thickness.

The Southwest Museum has set an enviable example for the Western States in particular, but for other parts of the country as well, for it bids fair to furnish the necessary focus or centre of interest for the rapidly increasing study of the aborigines, the history and the science of the Pacific Coast. To date, here are already on exhibition in its halls collections of primitive implements, weapons and utensils of the early inhabitants of Southern California, relics of the Cliff Dwellers of Colorado, Arizona and New Mexico, memorial collection of the explorer Fremont and of General Chaffee. The time and region generally identified with Spanish colonization is also well illustrated in the Caballerio collection of Spanish paintings of the Mission era and in William Keith's first sketches of the old Missions. The Spanish pioneers will be further represented in *El Adobe Real,* a memorial hall of appropriate architectural treatment, as its name indicates, yet to be erected. It is interesting also to note, in exemplification of the West Coast's effective interest in and necessary connection with things Oriental, that this institution has begun researches into trans-Pacific sociological conditions, due largely to immigration from the East and increasing commercial intercourse with China and Japan, and that the excellent collection of Professor House, tutor of the children of Yuan Shih Kai, China's first president, a collection covering Chinese education, civilization and art, has recently been acquired by the Southwest Museum.

Undoubtedly the near future will witness more exact contributions to our knowledge of the art of the inscrutable Oriental and a deeper study of the type and quality of the art of the Mission era in our wonderful Southwest.

A Model Public School Clinic

By Creighton Barker, M.D. of the New York Bureau of Municipal Research and Raphael Hume, Architect

ENGLAND pointed out the way for the supervision of the health of school children. Somewhat reluctantly, but none the less surely, the United States has followed England's example, and measures of varying effectiveness which provide for such supervision have been almost universally adopted.

The best thought on this subject has recently crystallized into the conclusion that a mere diagnosing and recording of physical defects is not sufficient, and that to produce maximum benefits a health supervision system should go much further and actually provide remedial measures for the defects discovered. For a time this treatment has been obtained in hospital clinics and dispensaries, but there are serious objections to such a plan. First, unless the physicians who serve as school inspectors act also as clinical attendants, there is no opportunity for close supervision of the children between clinics, a supervision which is extremely desirable. In addition to this, the children are exposed to unfortunate associations in the waiting rooms of public clinics; and lastly, it is frequently impossible conveniently to coordinate the public clinic hours with school hours.

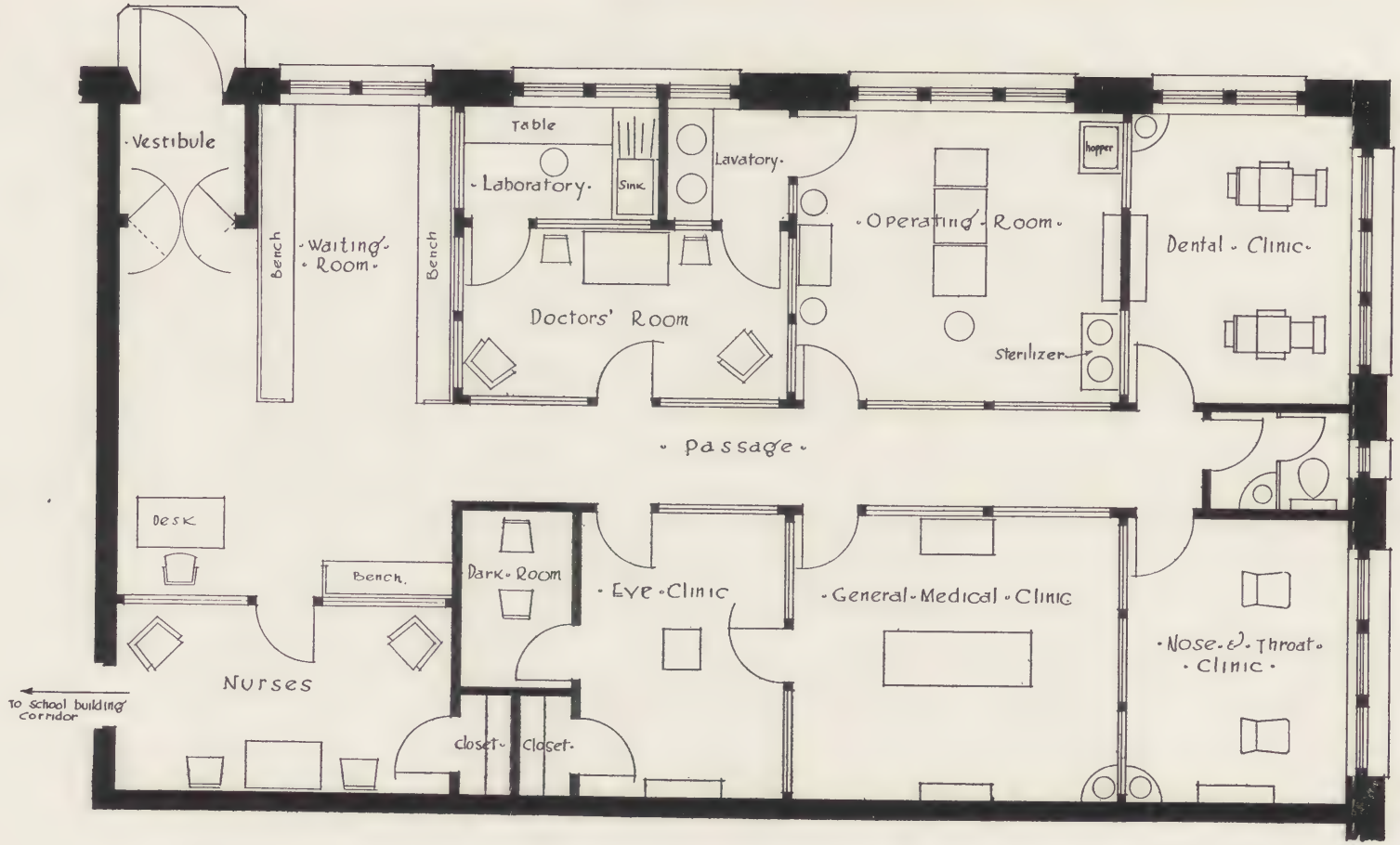
As a result of these objections the more progressive cities are installing clinics, under the direction of the department of education, which are solely for the use of school children, and in a short time no educational equipment will be considered complete unless it includes clinical facilities.

Statistics show that approximately seventy per cent. of our school children have some physical defect. All of these cannot be treated in the school clinic, but forty-eight per cent. of this number, or thirty-five per cent. of the school children, have dental defects, and in a large proportion of the cases unless the dental repair work is done by the city authorities it will not be done at all. Clinical accommodations for a school population of 20,000 can be installed in a floor space 28x50, and since this area corresponds approximately to the area occupied by two school rooms the installation of such a clinic in an old building is not difficult. If the clinic is to be included in the plans of a building to be constructed the details are manifestly simpler, but in either case certain fundamental requirements demand consideration.

1. If the clinical needs of the school population cannot be served by a single clinic of the size outlined herein, it is more satisfactory to install two or more clinical units in conveniently located schools rather than endeavor to consolidate all of the clinical activities in one place.

2. The clinical unit should not be relegated to the basement or other out-of-the-way place, but should preferably be located in a corner of the ground floor and have a separate entrance in order that there will be no opportunity for the children visiting the clinic to mingle with children attending the school in which the clinic is located. There should, however, be a means of communication between the clinic and the school corridor for the convenience of the clinical staff. Corner space is not well adapted for school rooms, but the additional window area makes it especially desirable for clinical use.

3. The psychology of the location of the various clinical rooms in relation to the waiting room is a factor of great importance. It is not encouraging to the juvenile mind to sit in the waiting room for half an hour listening to a playmate



PLAN OF A MODEL PUBLIC SCHOOL CLINIC.

cry out from the dentist's chair, or to catch fleeting glimpses through opening doors into the operating room made bloody during operations for the removal of tonsils and adenoids.

4. The clinical unit should provide the following:

(a) A nurses' office in which all records can be filed safe from molestation;
(b) A doctors' room and small laboratory;
(c) A surgical clinic, with scrub-up room, water sterilizer and equipment for minor surgical operations;
(d) A dental clinic;
(e) A general medical clinic;
(f) An eye clinic, with adjacent dark room for ophthalmoscopic examinations;
(g) A nose and throat clinic.

A mental hygiene clinic or place for the examination of mentally retarded children should be included in the school clinical equipment. This clinic is not, however, to be connected with the clinics for physical defects, but should be provided for in a quiet location in the building used by ungraded classes, where its field of usefulness is greatest and where the delicate mental tests may be carried on unhampered by the various disquieting influences present in the general clinic.

In the plan here presented a corner location has been chosen and the floor layout so arranged that the dental clinic receives light from two sides and the operating room has the diffuse northern light that is to be desired. Care has been taken to have the dental clinic farthest removed from the waiting room, with a sound deadening room between, and the entrance to all of the rooms is out of the line of vision of the occupants of the benches in the waiting room.

All too frequently dispensary waiting rooms are placed in out-of-the-way corners, unlighted and poorly ventilated. In this ideal floor plan care has been taken to so locate this part of the unit that it receives direct light and ample ventilation. The waiting room is so arranged that the occupants are under the constant observation of the nurse in charge of the admission desk, thereby precluding any opportunity for disorder among the children.

The interior of the clinic should be finished in complete accord with the modern ideas of hospital construction, with tile or terrazzo floors, coved bases and interior angles, no projecting mouldings, and flush metal trim at the door openings. The partitions forming the various cubicles are of wire lath and plaster construction, on light structural iron frames to a height of four feet from the floor; above that and to the ceiling they are of opaque glass in metal frames, and transoms for ventilation are provided in the partitions separating the various rooms from the corridor.



FRONT ENTRANCE—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.

St. Agnes' Church, Cleveland, Ohio.

John T. Comes, Architect

By

I. T. Frary

EVERY traveler returning from Italy carries with him, as one of the outstanding impressions of that artist's paradise, vivid pictures of her many campanili. These bell towers or watch towers are everywhere, and as one recalls the various places to which his journeyings have led him and visualizes the view of some distant town or the panorama of tile roofs in some medieval city, there is always a sturdy campanile rearing itself high above the neighboring roofs and forming the dominant feature of the picture.

Perhaps what makes them most interesting to the average American is the fact that, unlike the church towers to which he has been accustomed in his own land, the Italian campanili are not, as a rule, a part of the building to which they belong, but stand alone, on their own foundations. So much does this element of detachment add to the effect that it is surprising that the idea has not been used more commonly in America.

An interesting example of this treatment of the tower has been carried out by John T. Comes in connection with St. Agnes' Church, in Cleveland. The building is designed in a free manner, taking its chief inspiration from the Romanesque churches of France, and its external appearance is greatly enhanced in effectiveness by the dominating character of the semi-detached tower, which is more reminiscent of Italy than of France. Its use has not involved any serious sacrifice of ground space, but has meant a great gain in architectural effect. By a happy chance, due to a curve in Euclid avenue, the tower, although located well at the back of the lot, is brought almost directly in line with the axis of a considerable stretch of that thoroughfare, thus becoming the conspicuous feature of a long vista as one approaches from the east.

The exterior of the church lacks the crudeness characteristic of many of its prototypes, but instead has been given an air of refinement by the liberal use of ornamental detail. The front is still incomplete, awaiting the installation of a series of figures in niches prepared for them beside the doorways.

The plan is of the basilican type, with a narthex, nave, two narrow aisles, shallow transepts and an apse with a deambulatory.

In the three main entrances are bronze doors, the design of which is a simple arrangement of square raised panels separated by ornamental stiles and rails. Through these doorways one enters the narthex, which has a flat wood ceiling and is terminated at each end by a wood screen. The space behind one of these screens is occupied by the baptistery, while in the other is placed a stairway to the choir gallery, as well as an office and entrance to a toilet room.

The baptistery is raised one step above the narthex floor, the screen in this case being filled with clear glass. The walls and vaulted veiling are decorated with symbolical designs. A red and green marble wainscoting, with Botticino trim, forms a strong base for the rich colors on the wall above. The carved octagonal front of Botticino marble has a bronze cover balanced from the ceiling and is enriched with symbols of the seven sacraments and a head of Christ; the whole is surmounted by a statue of St. John the Baptist.

Entering the church proper, one can-

not but be impressed by its substantial dignity. Massive columns with capitals of varied design carry the arches, above which are squat columns set in recessed panels, which suggest the effect of a triforium, and above these the clerestory windows are grouped, two in a bay.

The nave is roofed with a great barrel vault, enriched by the use of square coffers filled with acoustic felt and membrane, dyed blue, and is broken by broad, flat, richly decorated arches carried across it in line with the columns beneath.

The aisles widen toward the rear into transepts, beyond which they form a deambulatory around the chancel. The chancel ends of the transepts are occupied by small side chapels. The aisle walls are broken by two recessed shrines and six confessionals. The latter are of oak, with an enrichment in the three doors of a bold, pierced fret in the upper panels, which are subdivided by narrow stiles studded with round bosses; a similar stiling is used in the lower panels, which are solid and without other enrichment. The doors are separated by engaged columns and the whole is framed in by a broad moulding carved with a zigzag ornament, the effect produced being bold and vigorous.

The pieta in the west aisle recess is an original composition, carved in wood by Mr. Henry Schmitt. It is well-balanced, painstakingly executed and makes a strong emotional appeal. The opposite shrine contains a mensa on which rests a marble bust of the Sacred Heart carved in relief, with a cross for a background incrusted with mosaic. The upper part of the shrine dado contains carved symbols touched up with color and gold. Heavy bronze candlesticks furnish the shrine adequately.

The pews are unique in design and have been kept very low with the idea of accentuating the apparent height of the room. A fine harmony exists between the woodwork and stonework, due to a grayish cast in the wood finish. This is particularly pleasing, as there is often a sense of unrest and discord where wood and stone are brought together, due to the excessive contrast between the sombre tones of the wood and the light tones of the stone, the former being often of a raw quality that is painfully evident when contrasted with the delicate grays of the stone.

The portion of the floor occupied by pews is of wood, but the aisles and other passageways are of square, handmade, variegated red tile, in which are introduced special ornamental tiles of various colors. Bordering the tiles is a broad band of gray Tennessee marble, which forms a strong line of demarcation between tile and wood.

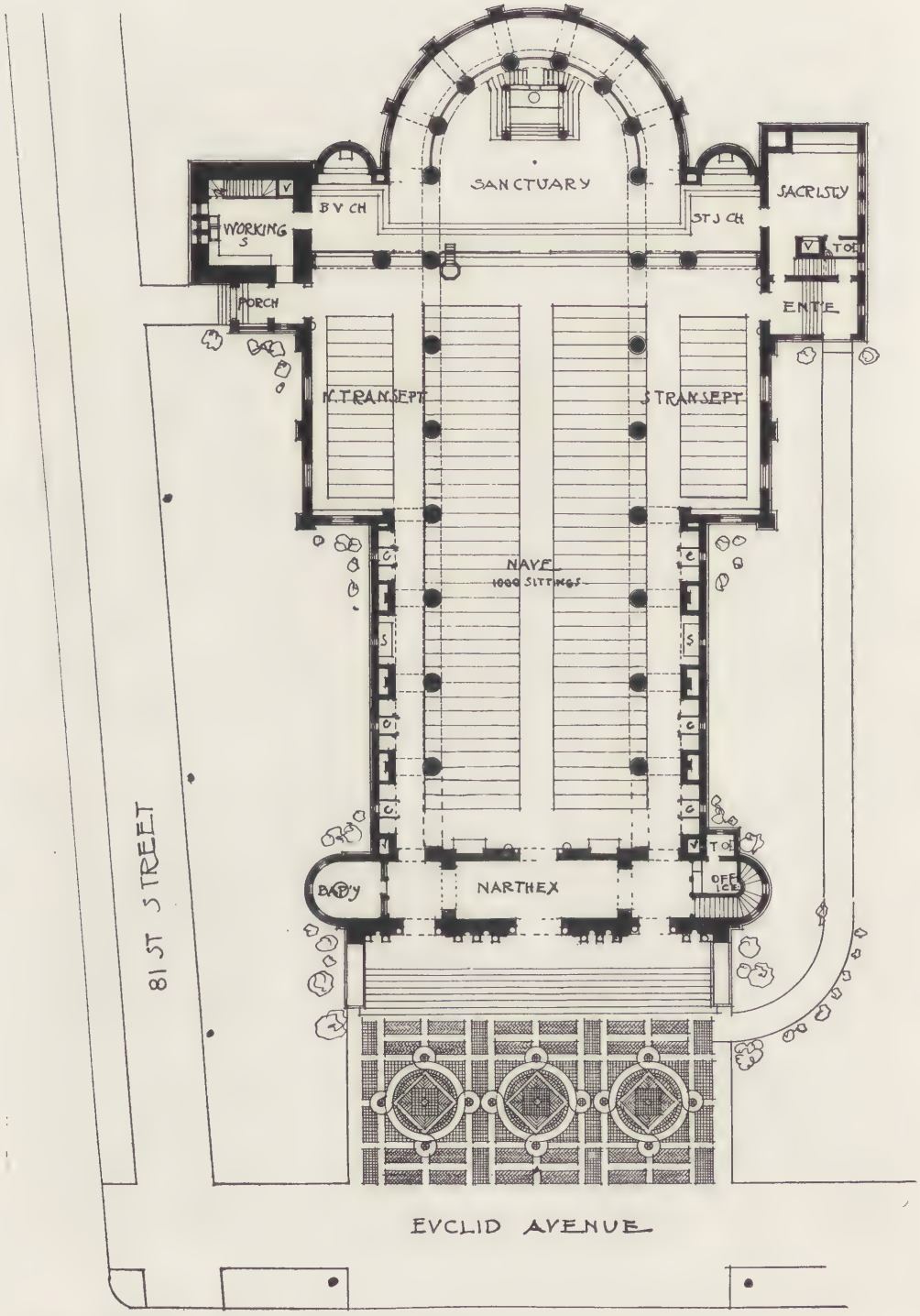
The effect of the chancel is greatly enhanced by the surrounding deambulatory, through the arches of which gleams the deep rich glass of the apse windows. The altar is surmounted by a ciborium or canopy of Botticino marble enriched with carving, Venetian mosaic and inserts of colored marble. Figures of the four Evangelists are seated at the corners and the whole is crowned by a gilded statue of St. Agnes, the model for which attracted considerable attention at the Pittsburgh Architectural Exhibition of 1916.

A unique feature of the high altar is the double flight of steps leading to a platform behind the altar, from which the ostensorium is deposited on a marble shelf surmounting the low reredos behind the circular gilt bronze tabernacle. The doors of this tabernacle contain panels representing Biblical scenes illustrating the sacrifice of the altar. The candlesticks and crucifix are of chiseled bronze and silver, inlaid with semi-precious stones. The black and gold mosaic with the colored marbles make the altar naturally the richest work in the church.

The high pulpit is of Botticino marble, with carved mouldings and perforated ornament cut in the paneling. The dado of the church is encrusted with vertical slabs of olive Vermont marble, finished at the top with a geometrical band of vari-colored marbles. The frames of the stations of the cross are of marble, the paintings for which are not yet in place. The plaster of the aisle walls is left plain as a foil for the rich coloring of the windows and for the arches and vaulting of the nave, all of which are lavishly embellished with decoration, carried out in



ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



FLOOR PLAN—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



NARTHEX—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



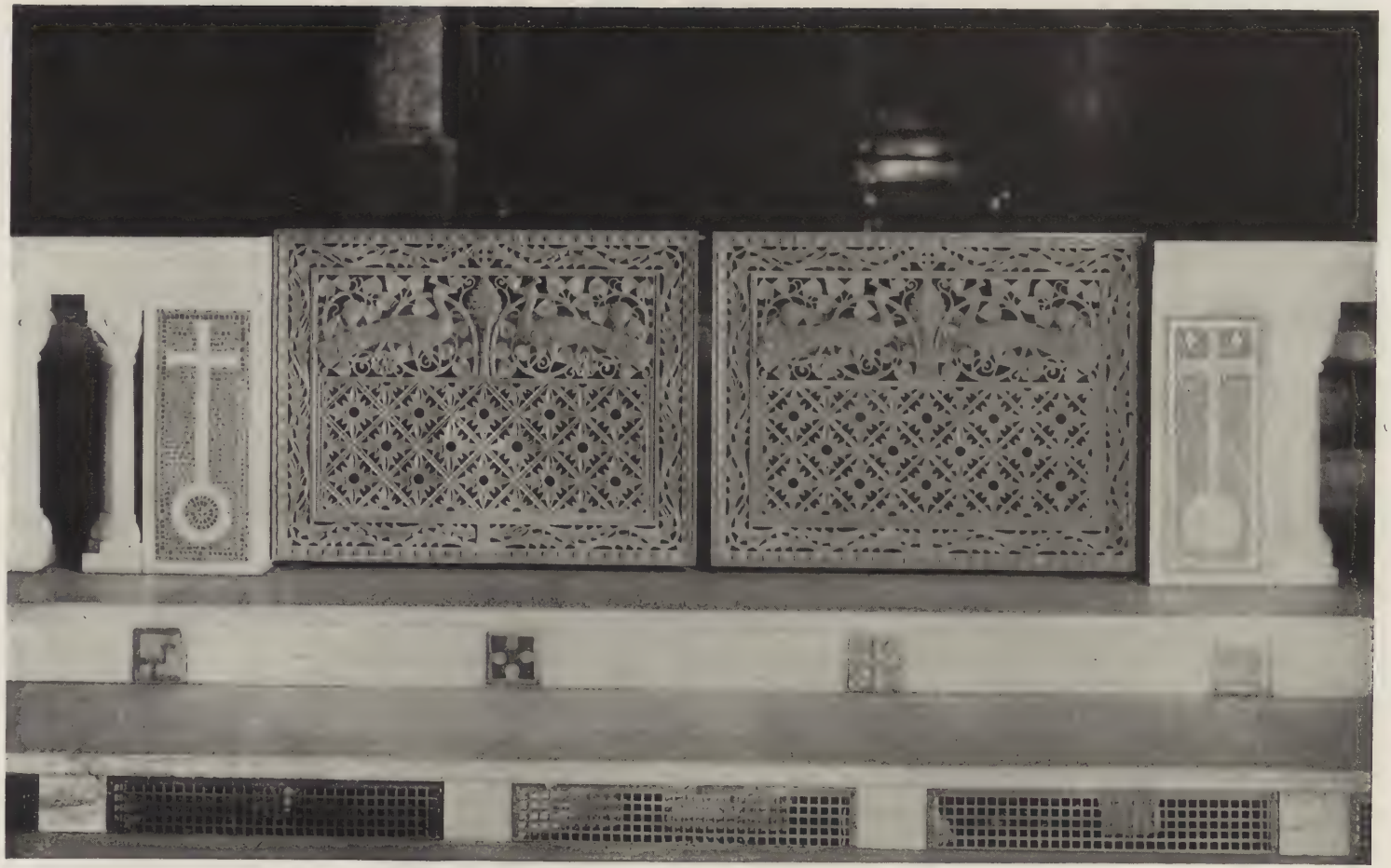
NAVE, LOOKING FROM CHANCEL—ST. AGNES' CHURCH,
CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



NAVE, LOOKING TOWARD CHANCEL—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



CHANCEL—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



CHANCEL GATES—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



ORGAN—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.



PRIE-DIEU—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.

the old Italian medium known as *al secco.*

The decorations have been provocative of considerable discussion, the execution is technically excellent, the drawing shows strength and confidence, and as a whole they are undoubtedly a *tour de force.* To the eye of the purist and the lover of precedent, however, they seem incongruous with the character of the building. The rich mosaics of the early Christian basilicas, which would be the natural source of inspiration for such decorations, glowed with a wealth of color, and the drawing of figures and ornament was usually crude, yet they had withal a positive feeling for the classical traditions. The decorations of St. Agnes' are full of color, are strong and bold in drawing, yet they are of a different type from those of the Romanesque and Byzantine periods—in fact, they show a strong leaning toward the modern schools of northern Europe, especially Denmark and Sweden. The figures of the apse, though quite original, are in closer conformity to the earlier traditions, but elsewhere the ornament, both in color scheme and detail, shows unmistakable evidence of modern inspiration. Whether this is a subject for commendation or adverse criticism is of course a mooted question between the exponents of individualism on the one side and the classicist on the other. Each will judge the results according to his own viewpoint.



SANCTUARY LAMP.

The symbolical meaning of the apse decorations by Mr. Felix Lieftuchter can be briefly explained as follows: The monumental figure of Christ in Majesty is seated on the throne, surrounded by



SIDE AISLE—ST. AGNES' CHURCH, CLEVELAND, OHIO.
John T. Comes, Architect.

a group of cherubim holding the seven lights of the apocalypse; this forms the central and dominating feature of the composition and takes the central place between the twelve apostles in the frieze below, representing Mankind, and the figure of the Eternal Father on the vault of the apse, thereby symbolizing the redemption of mankind through the Son of God. Between the figures of God the Father and God the Son is the Dove, symbol of the Holy Spirit, surrounded by seven golden flames, symbolic of the seven gifts of the Holy Ghost, forming together the traditional representation of the Holy Trinity. The figure of the Eternal Father is represented as Creator of the Universe and is surrounded by a large circle (symbolic of eternity) formed by the signs of the zodiac. On the deep blue background, representing the firmament, appear the stars and planets. Kneeling at the feet of Our Lord are the figures of the Virgin Mary and St. Agnes in attitudes of supplication, representing the saints of the church as intercessors for mankind at the throne of God. On either side of the central figure is a row of richly clad angels holding in outstretched arms symbols of the seven days of creation. The upward and outward movement of these figures following the large circle surrounding the figure of Jehovah and the oval aureola made by the wings of the cherubim, back of the figure of Christ, form together with this figure a rhythm which gives a feeling of solemnity and grandeur, which the architectural space, as well as the theme, requires. The inscription on the base of the throne: *Ecce Agnus Dei Qui Tollit Peccata Mundi,* "Behold the Lamb of God Who Taketh Away the Sins of the World," points to the fundamental idea of the composition, the redemption of mankind through Christ.



FONT COVER.

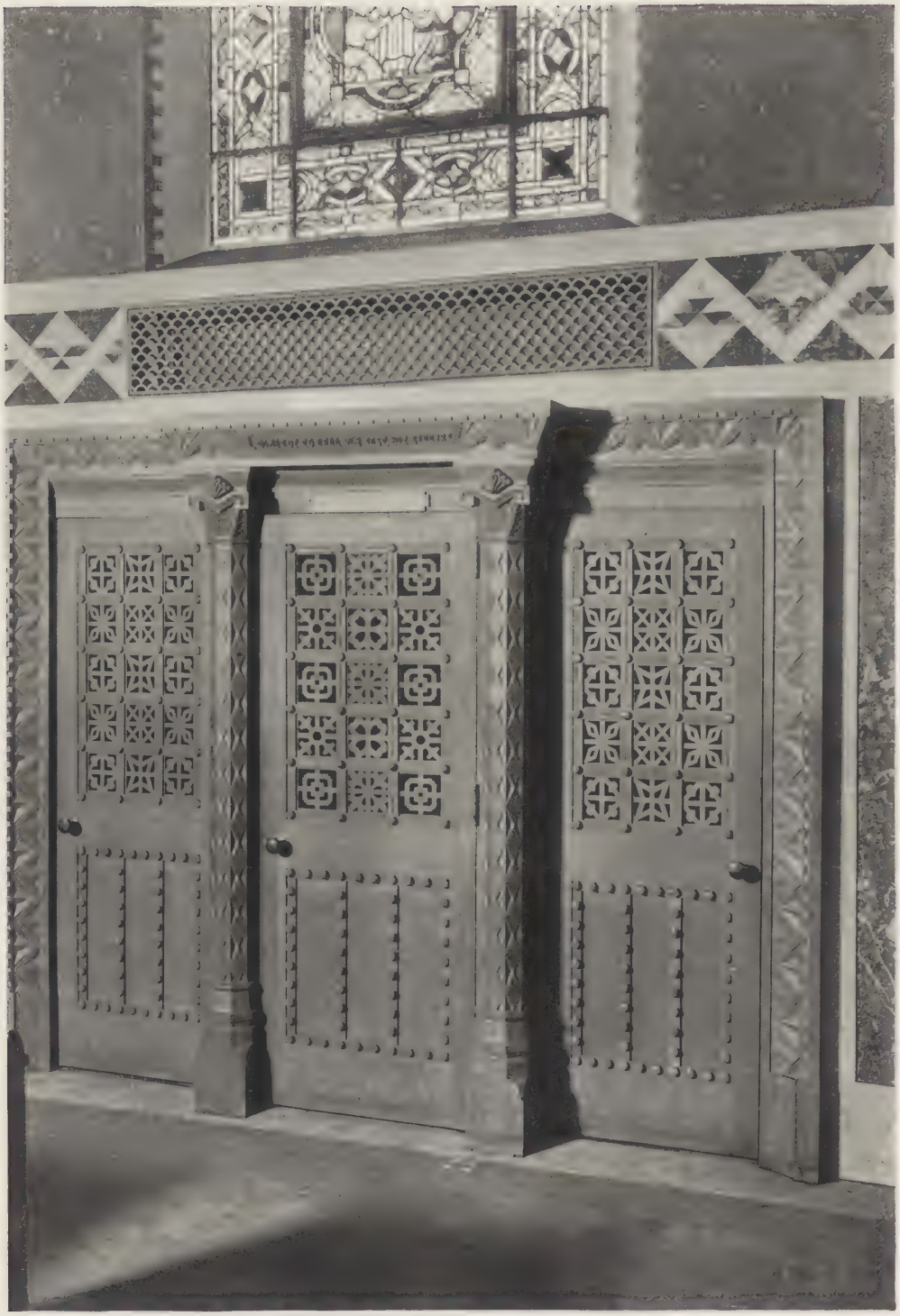
The windows are of the medieval type, containing scenes from the life of a saint in each window. Much of the glass in the windows is excellent in effect, being rich and jewel-like in quality. The area of glass is large for a church of this character, affording the possibility of using rich deep color effects in the glass without the sacrifice of needed light, which often is felt so seriously in churches with insufficient window openings.

The lighting fixtures are simple in form and execution, their interest being dependent largely upon form and the use of polychromatic decoration. They are made of sheet metal which has neither cast nor wrought enrichment, but instead is painted and gilded with ornamental motifs that cause them to tie-in admirably with their surroundings. The tall candles, which form a prominent feature of the fixtures, furnish but a small portion of the light, most of which is diffused through the semi-transparent glass in the bottom or is reflected upward from the reflecting surface of the glass.

The church is an interesting example of its type, and though there may be features which may be criticised, they are chiefly matters of detail and not fundamental errors. It is a good adaptation and a free rendering of a style that is not generally used, and it is to be hoped that other architects and other congregations will be encouraged to look more seriously into the possibilities of this style, which has left behind such glorious records in the countries of southern Europe and which offers such a wealth of suggestion to the builders of today. Not least among these suggestions is that of the detached campanile rearing itself apart from, and yet a part of, the greater structure to



PIETA—ST. AGNES' CHURCH.



CONFESSIONAL—ST. AGNES' CHURCH, CLEVELAND, OHIO. JOHN T. COMES, ARCHITECT.

which it belongs. It may not have the practical value possessed by it in the days when it was used as a place of vantage from which to detect the approach of an enemy or when its bells provided the only means of calling the people to worship, but its esthetic value is so great, and it is so reminiscent of the past, that it deserves an honored place among the treasured memories which we build into our churches of today.



TABERNACLE.



Photograph by Frank Cousins.

THE ROGER MORRIS HOUSE, OR JUMEL MANSION, ST. NICHOLAS AVENUE AND 160TH STREET, NEW YORK CITY.

The Roger Morris House
(Jumel Mansion), New York City

By
Rawson Woodman Haddon
With Measured Drawings by Joseph Palle

PART I.

THE Roger Morris house, purchased for preservation some fourteen years ago, is among the most noteworthy of the few frame buildings that remain from the early Georgian period of Colonial architecture. Indeed, the Morris house need not be excluded from comparison with Colonial houses built of other materials before the Revolution. So, when the city of New York took title to the property in October, 1903, it came into possession of a monument of architectural value as well as of historic interest.

During its long existence many conflicting legends and traditions concerning both the house and its occupants have naturally obtained currency. Of principal interest among these are the tales pertaining to the date of erection of the house. Mr. William Henry Shelton, in his recent history of the building, mentions a "romantic story of its building for the bride in 1758, the year of the marriage of Colonel Roger Morris and Mary Philipse . . ." a fable that has long passed from one historian to another. Legends of houses built for brides undoubtedly are popular, but, as a matter of fact, Mary Philipse had been married a number of years before this one could ever have been contemplated.

The history of the Morris house grounds—though not of the house itself—goes back to a time when the property was a rather small part of the Harlem Commons, belonging to the township of Harlem. In the course of time all or most of this land was divided into numbered lots drawn for by prospective settlers, lots sixteen and eighteen falling to Holmes and Waldron, who later sold their property to Thomas Tourneur, who in turn, on July 2d, 1694, sold his holding to Jan Kiersen. Two years later land could still be acquired with little trouble and practically with no expense. Kiersen then petitioned the town for a grant of "half a morgen of land from the common woods, lying at the south-east hook of the land that Samuel Waldron has drawn out of the common woods, which half morgen of land he may build upon, thereon setting a house, barn and garden, for which he promises to let lie a morgen of land upon the north-east hook of the aforesaid lot; leaving a suitable road or King's way betwixt his house and the lot of Samuel Waldron."

And on March 7, 1700, the town magistrates gave him the land he wanted and he thereupon built a house, probably on the very site of the later Roger Morris mansion.

By 1763, after some sixty years of possession by Kiersen and his descendants, the property had passed into the Dyckman family through Yantie, a daughter of Jan Kiersen, who had married Jacob Dyckman. In this year, James Carroll, a butcher of New York, bought the entire tract for one thousand pounds of good and lawful money of New York, and the deed was duly signed with the signatures, or "marks," according to their ability, of Jacob Dyckman Senr., and Yantie his wife, as well as by their children.

The conveyance sets forth in detail the boundaries of the property, which lay on both sides of the highway to Kingsbridge, and adjoined land owned by certain gentlemen—evidently farmers—named John Low, John Benson, Johannis Waldron, Arent Bussing, Barent Waldron, Mark Tiebout, and John Nagel; and

from a clause in the conveyance we may get a glimpse of what a pleasant bit of property this good and lawful money brought to the "butcher of New York," for he is to have the property "Together with all and Singular the Orchards Gardens Fences Trees woods underwoods Fields feedings Pastures meadows Marshes Swamps Ponds Pools lakes streams Rivulets Runs and Streams of Water Fishing Fowling Hunting Hawking and all other profits priviledges advantages Emoluments Hereditaments right of Commonage and appurtenances to the same belonging or anywise appertaining . ." which he was to "freely, quietly and peaceably have, hold, use, enjoy and keep . . . forever."

From this it is plain that the Morris house could not have been built in 1758. The property was then and for five years later in the ownership of the Dyckman family. James Carroll, who purchased it from the Dyckmans, seems to have had no intention of retaining the property "forever," and it is most probable that he bought it merely as a speculation. At any rate, in the New York Mercury of May 13, 1765, the property was advertised as follows:

"To be Sold, A Pleasant situated Farm, on the Road leading to King's Bridge, in the Township of Harlem, on York-Island, containing about 100 Acres, near 30 of which is Wood-land, a fine Piece of Meadow Ground, and more may easily be made; and commands the finest Prospect in the whole Country: The Land runs from River to River: There is Fishing, Oystering and Claming at either End; there is on it a good House, a fine Barn 44 Feet long, and 42 Feet wide, or thereabouts; an Orchard of good Fruit, with Plenty of Quince Trees that bear extraordinary well; three good Gardens, the Produce of which are sent to the York Markets daily, as it suits. An indisputable Title will be given to the Purchaser. Enquire of James Carroll, living on the Premises, who will agree on reasonable Terms."

This advertisement appeared in only two issues of the paper—May 13 and May 18—and the date of its discontinuance probably indicates the approximate date of the purchase of the property by Roger Morris, but the deed was never recorded and the exact date of the conveyance is unknown. It is certain, however, that the Morrises lived at this time in their town house on Broadway and Stone street, near the old Fort, and that, in October, 1765, this city house was offered for sale.

It is altogether probable that we may call the period between the discontinuance of the advertisement of the Harlem property on May 18, 1765, and October of the same year, when the downtown house was offered for sale, as the period of building.

The historian already quoted goes on to say—somewhat after the manner of many far less well informed historians—in discussing the construction of the house: "That was a period of honest construction, when the oak timbers were cut and scored in the woods and hauled on to the ground by oxen; when the sills and posts and plates were shaped with broad-axe and adze and mortised with auger and chisel. The carpenters having completed the work of framing, the farm neighbors came to the 'raising.' The sills were laid on the cellar walls, the sections of the frame were raised into place and held by spike-shod poles of hickory until they were made secure for the ages by white oak pins. The raising was 'bossed' by the head carpenter, with hoarse cries of 'Ready! He-o-heave!' and 'Steady!' and when the work was done there were merry quips over the hard cider and doughnuts.

"There were special features in the construction of this stately house which were not usual in ordinary buildings. The outer walls were lined with good English brick, which received the plaster and served to keep out the heat of summer and the damp of autumn. The severe plainness of the Colonial interior, where ornament was usually lavished on mantelpiece and staircase, would suggest that rapidity of construction may have been a prime object and that the summer of 1766 may have found the house ready for occupancy. No essential, however, of stability in the foundation or in the superstructure was neglected, and only on the beautiful doorways was time lavishly spent. The plan of the house is Georgian, but of a peculiar English type seldom seen in this country. The distin-

guishing architectural feature is the deep, octagonal drawing room projecting back from the broad entrance hall and forming with its wide doorway a peculiarly dignified interior. . . .

"The house, when completed, contained (counting halls) nineteen rooms and a finished and plastered garret. New York was a slaveholding colony in those early days, and the great kitchen, floored with plank, was in the basement. One of the three half-story rooms at the top of the house is provided with a fireplace, which seems never to have had a mantelpiece or any framework of wood, and may have been provided for the comfort of a pair of faithful negro servants, who cared for the house during the winter."

While we can accept many of the statements just quoted, it is well to call attention to the fact that certain details, such, for instance, as walls lined with "good English brick," were not unusual, but were most certainly the ordinary, usual methods of construction.

That a "raising" common in rural districts was here called together seems doubtful. New York at that time was well supplied with skilled workmen, whose presence would have made the endeavors of voluntary "raisers" more or less useless.

As to design, too, there would have been no excuse for haphazard method in laying out the building, for architects, if not numerous, were at least not unfamiliar persons in the city. Indeed, in the year of Colonel Morris's marriage, one Theophilus Hardonbrook, who has some excellent designs to his credit, was practicing in the city as "Architect"; and in looking for a possible designer for the Morris house it is not stretching the point too far to suggest the one or the other of the two gentlemen who announced themselves as architects in the local papers just a month before Morris probably bought the property upon which the house now stands. In the New York Mercury, on April 8, 1765,

"DOBIE and CLOW Builders, In Division-Street, TAKE this Method of informing the Public, that they undertake to build in Stone or Brick, Plaster and Stucco Work of all Kinds, after the London Taste. Any Gentlemen who please to employ them, may depend upon having their Work so done, as to bear the nicest Scrutiny. If required, they will also give in Plans and Elevations, with Estimates of the Whole in Squares, Rods and Yards, together with the Quantity of Materials Buildings of any Dimensions will take, in such a Manner as any Gentleman may know his certain Cost before he begin to build."

Roger Morris at this time was forty-eight years of age. He had served in the British army, obtaining the rank of Major in 1758, and in 1760 was promoted to a Lieutenant-Colonelcy. He had served with distinction under Wolfe against Quebec and later in the expedition against Montreal. In June, 1764, he retired from the army. In 1756 Morris married Mary, the daughter of Frederick Philipse of Yonkers. The old Philipse home, like the Roger Morris mansion, is now an historic museum. For a few years the Morris home, as one historian says, "dispensed its hospitality, sharing in social splendour with the homes of the De Peysters, the DeLanceys, Livingstons and others." Among the Morris guests were Sir Henry Moore, the governor of New York, who took up his duties during the midst of the Stamp Act riots, the Earl of Dunmore, Sir William Tryon, and Dr. Benjamin Franklin.

With the beginning of the Revolution, during which the Morris house became the headquarters first, for a few weeks only, of the American forces under Washington, and later of the British under General Knyphausen, the house entered upon one of the most interesting historical periods of its existence.

Morris was a loyalist, and when the British troops evacuated New York City in 1783, he and his wife accompanied them to England. The property was then confiscated and sold. On July 9, 1784, the commissioners of forfeiture conveyed to John Berrian and Isaac Ledyard, a physician, for 2,250 pounds "All that certain Messuage or Dwelling house, Barn, Stables, Outhouses and Farm situate in the Out Ward of the City of New York on the Heights commonly called Haerlem Heights containing One Hundred and fifteen Acres Forfeited to the People of this State by the Conviction of Roger Morris Esquire. . . ."



NORTH ELEVATION—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



SOUTH ELEVATION—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



WEST ELEVATION—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



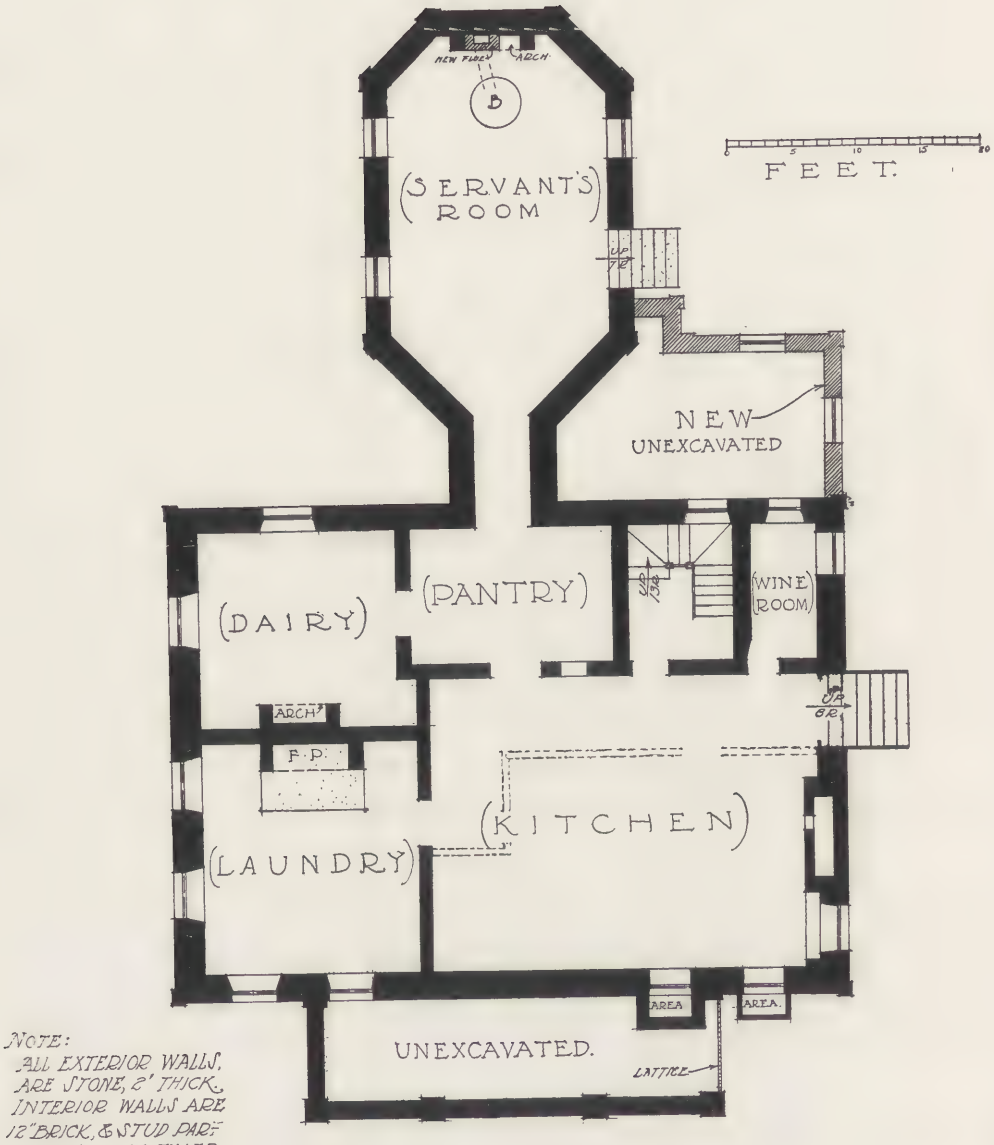
EAST ELEVATION—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



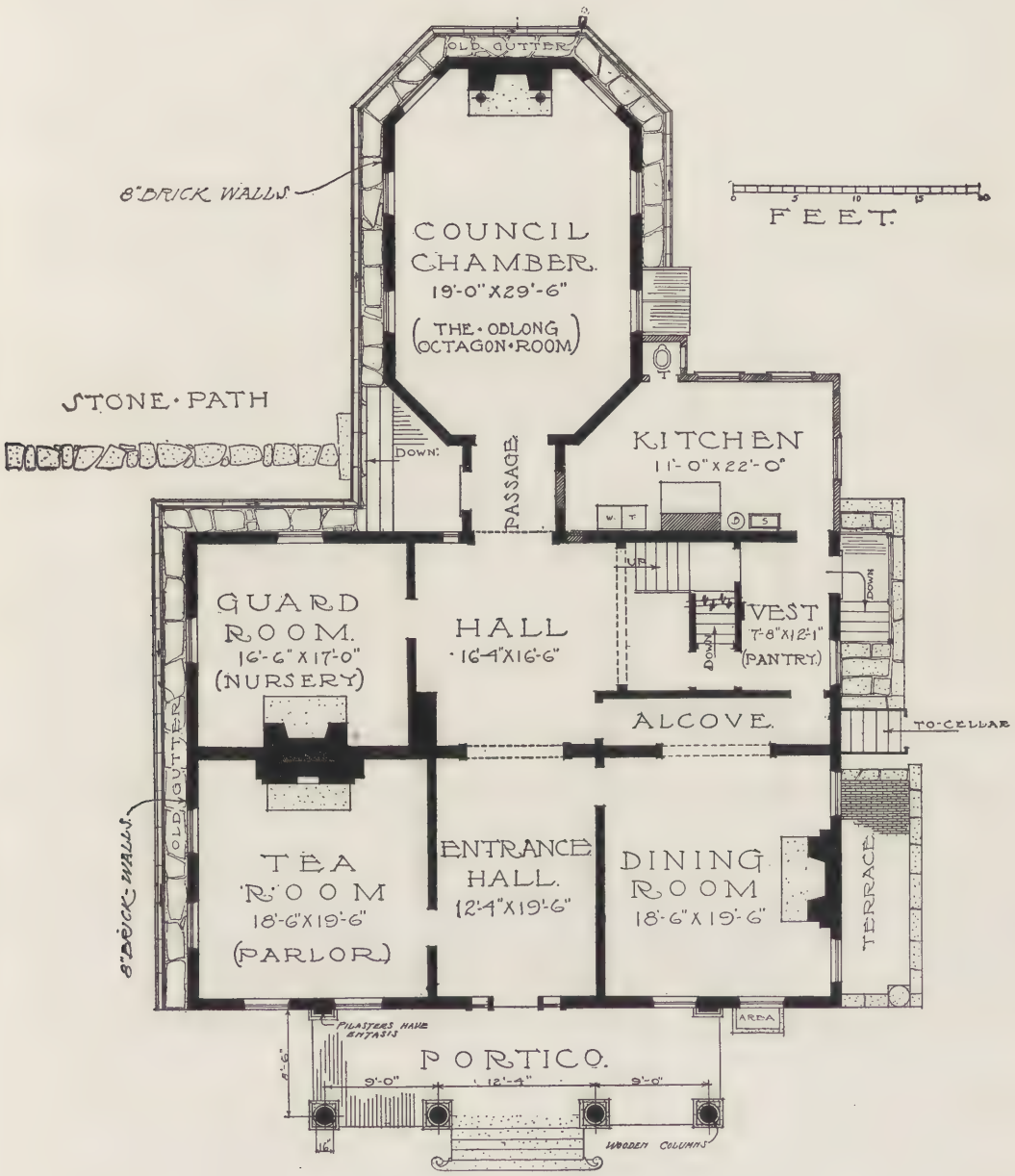
CROSS SECTION—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



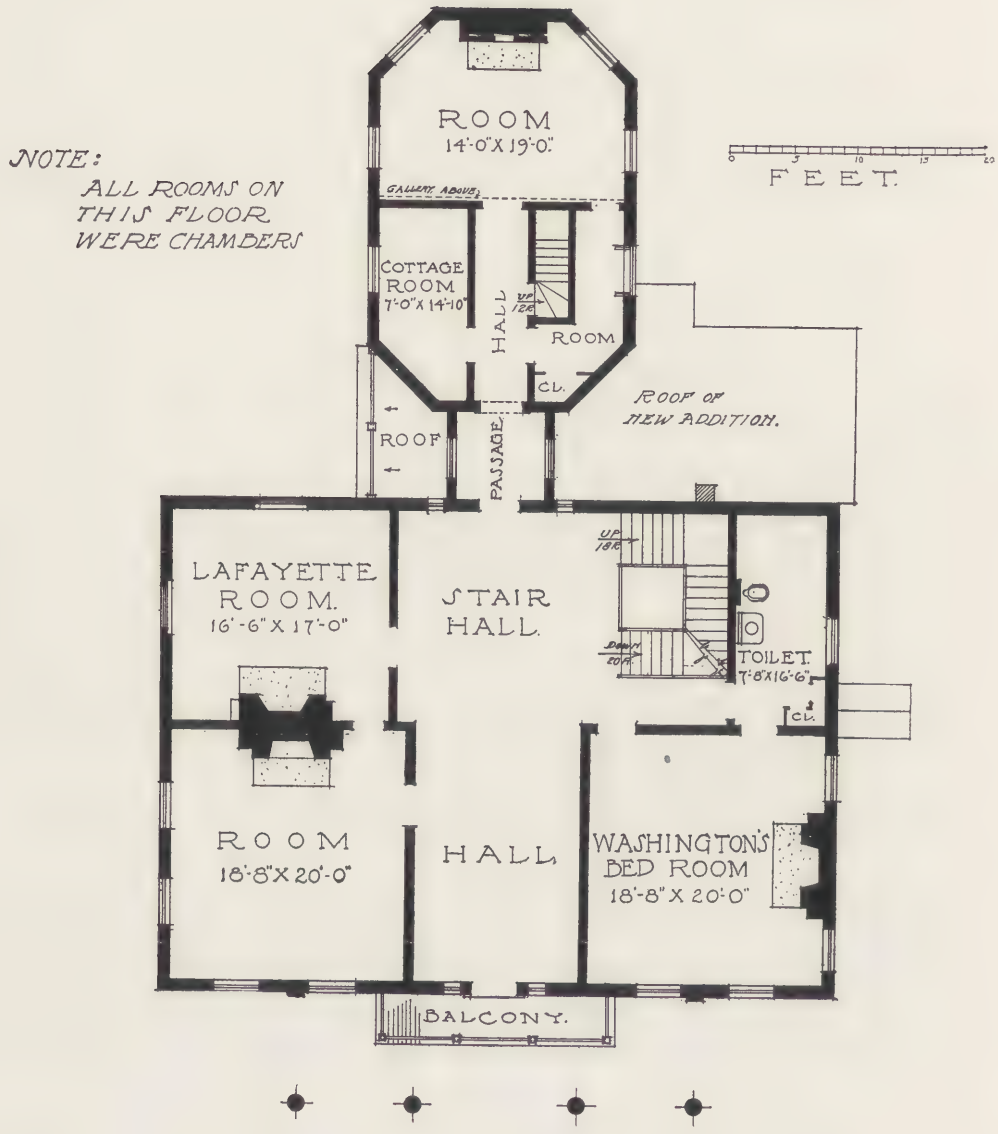
LONGITUDINAL SECTION—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



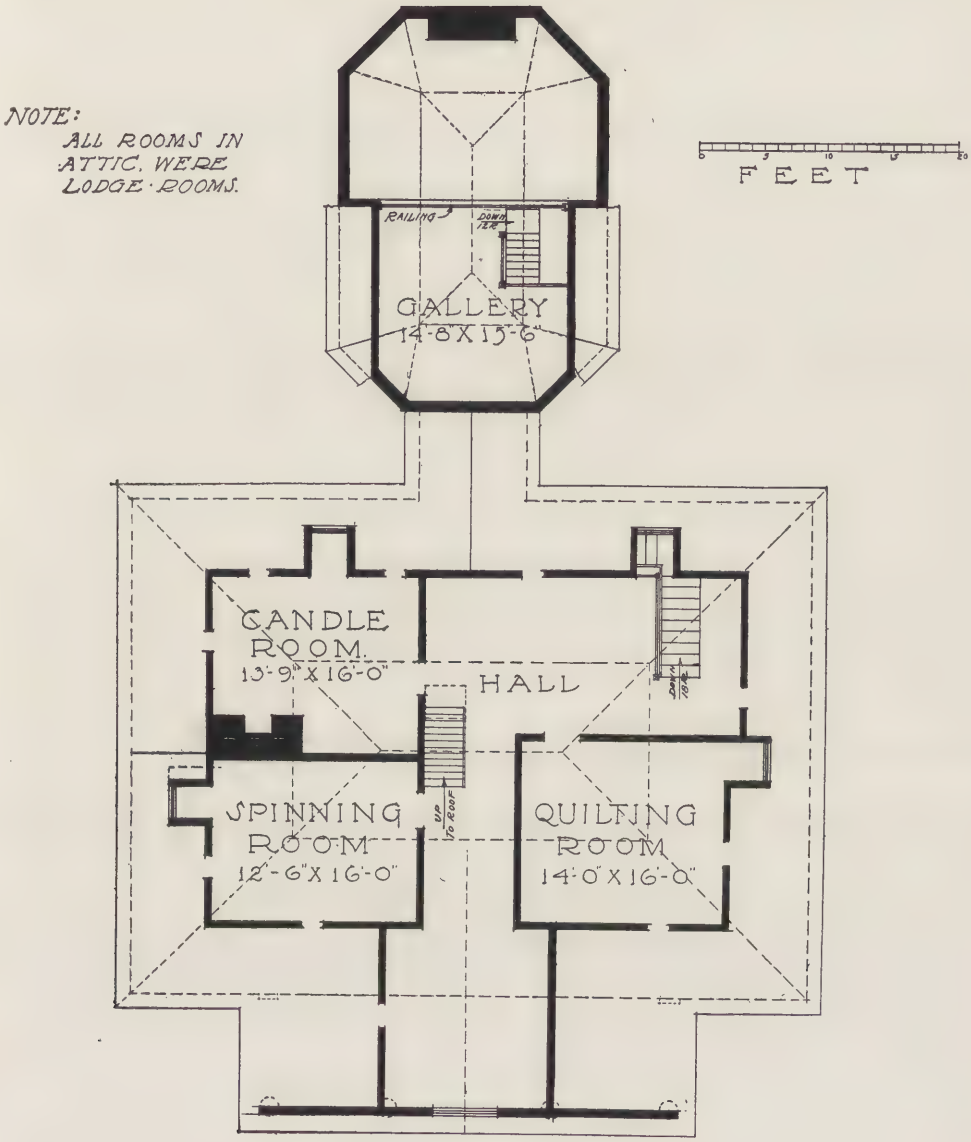
PLAN OF CELLAR—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



PLAN OF FIRST FLOOR—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



PLAN OF SECOND FLOOR—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



PLAN OF ATTIC—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.

This was recorded in 1792. A year later all of Morris's personal property, consisting of his furniture, tapestries, plate, and china and glass was sold—that is, whatever may have been left in the house or in safe keeping after occupancy by the various military forces who made their headquarters there.

At this time began a period of decline for the Morris mansion. In April, 1785, following the sale of the house to Berrian and Ledyard, three men, one of them Talmage Hall, advertised that they had built "Genteel Stage Waggons" which they proposed to run twice a week from New York to Albany. They would start from Cape's Tavern, New York, and from Lewis's, in Albany, "Monday and Tuesday Mornings, precisely at five o'clock." They flattered themselves that the exertions they were making to repair the roads, "the elegance of their waggons and horses," the pains they had taken to establish good houses for entertainment along the routes, and especially "the very moderate price of four pence New-York currency per mile, for each passenger," would induce the public to encourage the enterprise. One of these "houses for entertainment" was the Roger Morris mansion. Talmage Hall, who evidently foresaw alluring profits in the establishment of a roadhouse, a month after the stage line was inaugurated inserted the following advertisement:

"The Subscriber having taken the elegant House on Haerlem Heights, of Isaac Ledyard, Esq.; for the accommodation of his eastern and northern stages, has been also at a very considerable expence, in furnishing it for the accommodation of Ladies and Gentlemen from town, as well as Gentlemen travellers—He has provided himself with ready and obedient servants, and the best fare the country and town affords.

"Parties from town, and travellers, may be served with Breakfasts, Dinners, Suppers, Relishes, Tea, Punch, &c. at ten minutes notice. He keeps the choicest liquors, and promises that his guests shall have the most prompt attendance. He has provided also genteel lodgings, stabling and pasture.

"The Octagon room is very happily calculated for a turtle party, and his guests shall have for deserts, Peaches, Apricots, Pears, Gooseberries, Nectarines, Cherries, Currants and Strawberries in their seasons.

"The want of a genteel house of entertainment in the neighbourhood of the town, has been a very common complaint; the subscriber has made this as much so, as his money and taste would possibly allow; and humbly hopes for the encouragement of the public."

It will be remembered that the Morris furniture was sold at auction in 1793. The advertisement above quoted appeared beginning May 23, 1785, full four years earlier than the sale of this furniture. It suggests the question of whether all the glorious old Morris furnishings were still in the octagon and other rooms of the house.

The first entry under the name of Hall in the very first directory published in New York City—that of 1786—is "Hall, innkeeper, Haerlem Heights," but the name does not appear in the directory of the following year. Hall also kept a tavern in the lower part of New York City, at 49 Cortlandt street, and in addition to the stage line to Albany, he had another line which ran from New York to Rye. In November, 1786, Mason Wattles took over Hall's stage lines to Boston and Albany, and in the fall of 1787 Hall discontinued the stage line to Rye, which passed into the hands of Obadiah Wright; at the same time his tavern on Cortlandt street, which was the starting-point of the various stage lines, went into the hands of Christopher Beekman. Financial reverses had evidently overtaken him. Probably the roadhouse at Harlem was discontinued at the same time.

It was in 1790, after the failure of Hall's roadhouse, that Washington and a party of friends revisited the Morris mansion where they had a dinner served by a Mr. Mariner. Washington records in his Diary that the house was 'in the possession of a common farmer."

In March, 1788, the Morris property was offered for sale. The advertisement states that the "mansion house and out buildings" were "perhaps not exceeded in this State for elegance and spaciousness," and that "the view from the house" . . . was "the most commanding on the island." In 1791, Anthony L. Bleecker, of New York, paid a thousand pounds for Berrian's interest in the Morris property, and in the following year he purchased the remaining half interest

from the heirs of Ledyard for the same amount. In other words, Bleecker paid something like $10,000 for the Morris Mansion with all the outbuildings and one hundred and thirty acres of land! Having now secured complete ownership of the property, Bleecker offered it for sale. The advertisement gives an excellent description of the property at this period. In fact, it is probably as complete a description of a house as will be found in any early advertisement:

"To be Sold at Private Sale, That pleasant and much-admired seat at Haerlem heights, formerly the property of the Hon. Roger Morris, distant 10 miles from New York, containing about 130 acres of good arable pasture and meadow land, including 5 acres of best salt meadow. The land produces good crops of grain and grass, and extends across the Island from river to river, and from the advantage of a communication by water on either side, and the easy transportation of manure from the city may be brought to any state of improvement required.

"On the premises is a large Dwelling House, built in the modern stile, with taste and elegance: It has in front a portico, supported by pillars, embellished and finished in character: a large hall thro' the centre; a spacious dining room on the right, with an alcove, closets, and a convenient pantry and store room adjoining, and beyond these, a light easy mahogany staircase. On the left is a handsome parlour, and a large back room, particularly adapted and fitted for a nursery. A passage from the rear of the hall leads to an oblong octagon room, about 32 feet by 22, with six sash windows, marble chimney pieces, a lofty airy ceiling. On the second floor are seven bed chambers, four with fire places and marble hearths; and a large hall communicating with a gallery under the portico, and from which there is a most inviting prospect. On the upper floor are five lodging rooms, three of which have fire places; and at the top of the house is affixed an electrical conductor. Underneath the building are a large commodious kitchen and laundry, a wine cellar, storeroom, kitchen, pantry, sleeping apartments for servants, and a most complete dairy room, the floor a solid flat rock, and which with common attention to cleanliness cannot fail to render the place constantly cool and sweet.

"There are also on the premises a large barn, and most excellent coach house and stables. The buildings have been rather neglected of late, and will want some repair, but are in other respects substantially firm, sound and good.

"The house has a southern prospect, and being situated on rising ground at the narrowest part of York Island commands an extended view of the Hudson and the opposite range of lofty perpendicular rocky clifts that bound its western shore, of the East river, Harlem river, Hellgate, the sound many miles to the eastward, and the shipping that are constantly passing and repassing those waters. In front is seen the city of New-York, and the high hills on Staten Island. distant more than 20 miles. To the left, Long Island, Westchester, Morrissania, and the village of Haerlem, with its beautiful level, cultivated surrounding fields, exhibit a variety of the most picturesque and pleasing views; in short, Haerlem Heights, affords perhaps a prospect as extensive varied and delightful as any to be met with in the United States; and considering its healthy, desirable situation, the ample accommodation of the buildings, its proper distance from town, the excellent road that leads to it, and the many other attendant advantages cannot fail to strike the observant beholder as an eligible retreat for a gentleman fond of rural amusements and employment, and who wishes to pass the summer months with pleasure and comfort."

This attractive advertisement resulted in the sale of the estate in 1793 to William Kenyon for 3,750 pounds. Kenyon not only purchased the Morris property, but increased his holdings by buying adjoining land. Just what use he made of his ownership is not known. It is altogether probable, though, that the house at this time was in need of much repair, and it is more than likely that many minor changes were made in the interior decoration, if not in the structural parts of the house. Kenyon retained possession until August, 1799, when he and his wife Abigail made conveyance of the property to Leonard Parkinson "of Kinnersley Castle in the County of Hereford in the kingdom of Great Britain." At this period, also, certain changes, extensive redecorations certainly, must have been made and the house was occupied by members of the Parkinson family until its sale in 1810 to Stephen Jumel.

Stephen Jumel was a French merchant and evidently a man of cultivated taste. Having purchased the Morris mansion, it is said that he made a conscientious effort to "restore" the old house to something like its former condition when it was the mansion of Roger Morris, or, as one historian has it, he, "with all the enthusiasm of a compatriot of Lafayette,



FRONT DOOR AND BALCONY—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.
Photograph taken by C. W. Stoughton in 1886.

set about the task of restoring the house that had been occupied by Washington as his headquarters to its original condition." Questionable as this statement is, in view of the large amount of work that must have been added at the Jumel period—work which Mr. Shelton and other historians ignorantly ascribe as being original colonial work—it has nevertheless passed unquestioned until the present, and an attempt will be made in the second part of this article to distinguish and sort the original colonial details from the later nineteenth century work.

It has even been said that samples of "old Colonial" wallpaper were sent abroad for reproduction, and furniture and other decorations were secured to harmonize with the old time interior. The well-known fact, however, that the greater part of the Jumel furniture was of the Empire style, absolutely disproves this latter statement. Walks and gardens were laid out, the estate was extended by the purchase of adjoining lands, and everything points to the fact that the grounds undoubtedly were very greatly improved and beautified.

Connections between Jumel and Napolean Bonaparte seem to have been intimate. So much so, in fact, that Jumel is said to have gone to France in 1815 for the purpose of bringing Bonaparte to America. This offer, which was quite naturally declined, secured for him the friendship of the Bonaparte family.

"Before his departure for St. Helena, Napoleon Bonaparte gave numerous presents to Stephen Jumel," which were long preserved as family heirlooms. "They had also many pieces of furniture and paintings belonging to the Empress Josephine; a set of drawing room furniture once the property of Charles X; an old chandelier, the property of Moreau; and relics which had belonged to various kings of France, Louis Napoleon, and very many other distinguished people. The chandelier, now in the Council Chamber, is like the one at Fontainebleau."

The NEW BUILDINGS *of the* SEA VIEW HOSPITAL

STATEN ISLAND, N. Y. CITY

Edward F. Stevens and Renwick, Aspinwall & Tucker
Associated Architects

THE Department of Charities of the City of New York in its various hospitals and sanitaria cares for more afflicted human beings than any like department in the United States. The insane and the feeble-minded, the chronic and the acute, the surgical and the medical, the children and the aged, the lame, the halt and the blind are gathered under the sheltering wing of this department. The average number of patients cared for in April, 1917, was twelve thousand, and the department requires a staff of four thousand persons, from Commissioner Kingsbury and Deputy Commissioner Wright down to the coal heaver.

While the majority of the cases are those usually found in city institutions, there are also many thousands of cases of pulmonary tuberculosis. To segregate and better care for the men and women afflicted with this disease, the hospital on Staten Island was conceived.

The first group of buildings, designed to care for one thousand, was finished just prior to the inauguration of the present city administration. It was soon found that the buildings, splendidly planned and built as they were, did not provide for the proper segregation and classification of the cases; that there was not sufficient provision for the ambulatory or walking cases, and that relatively there was too ample provision for the bed cases.

Accordingly, Commissioner Kingsbury proposed to devote the old buildings wholly to bed cases and make the hospital a two-thousand-bed institution, and to erect new buildings for the ambulatory cases. It is well known that the proportion of bed cases to walking cases is about "fifty-fifty." The problem of the new Sea View buildings is, then, to provide for the housing of one thousand ambulatory cases. The new buildings are divided into two groups—for four hundred women and for six hundred men.

The character of the land, sloping toward the south, gives the best sunshine as well as protection from cold north winds, and is high enough above the surrounding country to give the view from which the institution gets its name.

The women's group, at the northeast of the main building, consists of eight ward buildings, each accommodating forty-eight patients; while the men's group at the southeast consists of thirteen ward buildings, each accommodating forty-eight patients, and a "group" or executive buildings.

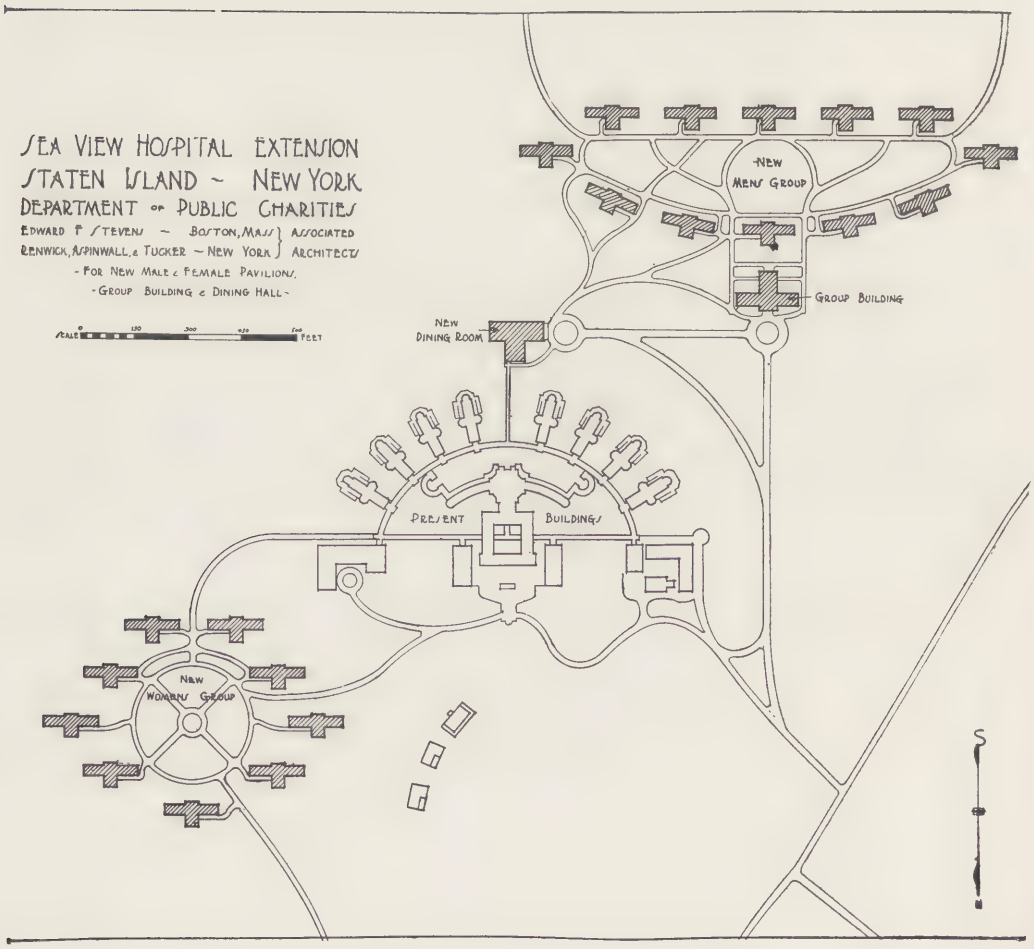
Dining facilities for the men's group will be had by a new dining hall placed on the main axis of, but at a little distance from, the original group, and served by the main kitchen. This building also serves for an entertainment and assembly hall and for a chapel for patients of both sexes.

While the entire institution will be supervised from the main administration building, there is provided what is termed a "group" building located in the centre of the male group. This building will contain the offices and the living quarters of the matron and of the medical examiner for the group. There are examining rooms, pharmacy and treatment rooms, baths for men, store, barber shop, dental treatment room, recreation rooms and library, as well as workrooms for various industries, and linen rooms where all linen for the group will be given out. In other words, this is the social and industrial centre for the male ambulatory patients.

The pavilion buildings, twenty-one in

number, are to be built practically alike. These are two stories in height, of fireproof material. Each is divided into four sleeping apartments of twelve beds each, with each two beds separated from the others by a dividing screen six feet high, but open on end and underneath to allow circulation. These open-air wards are not heated and are open to the south, with the possibility of being closed by cloth screens on frames hinged at the top. For each two wards a heated day room is provided, connecting directly with the toilet section, beyond which is the locker room. Each patient is provided with a well lighted and ventilated locker, three by four feet, with door. This room, small as it is, is large enough for the patient to get into and to look over his cherished belongings, away from the gaze of the fellow patient of an inquiring mind.

The grounds surrounding the hospital are extensive and are to be laid out as a park, with walks through the groves. The new buildings are to be heated by steam and hot water from the central plant. The lighting of the building and grounds will be cared for from the same plant.





WOMENS PAVILION
FIRST-FLOOR-PLAN

SCALE FEET

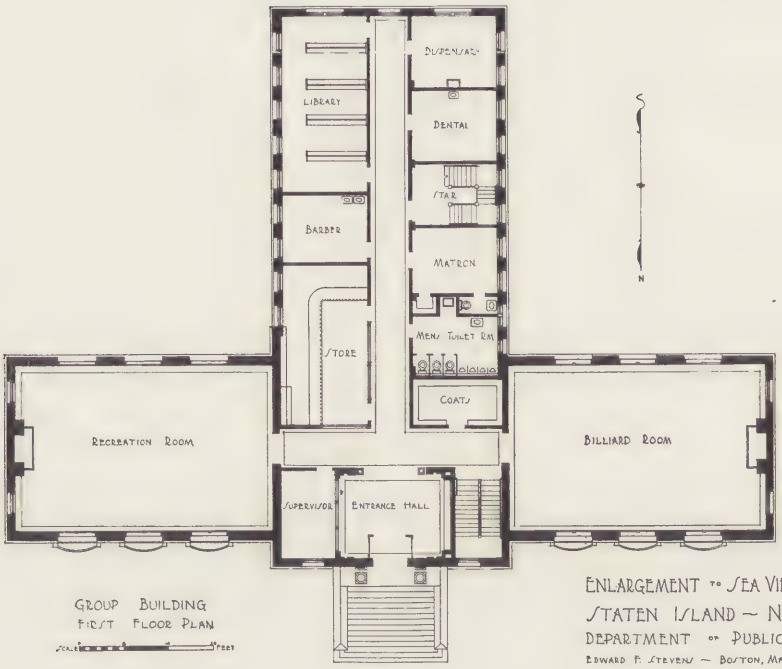
ENLARGEMENT TO SEA VIEW HOSPITAL
STATEN ISLAND — NEW YORK
DEPARTMENT OF PUBLIC CHARITIES
EDWARD P. STEVENS — BOSTON, MASS. } ASSOCIATED
RENWICK, ASPINWALL & TUCKER — NEW YORK } ARCHITECTS



MENS PAVILION.
FIRST-FLOOR-PLAN

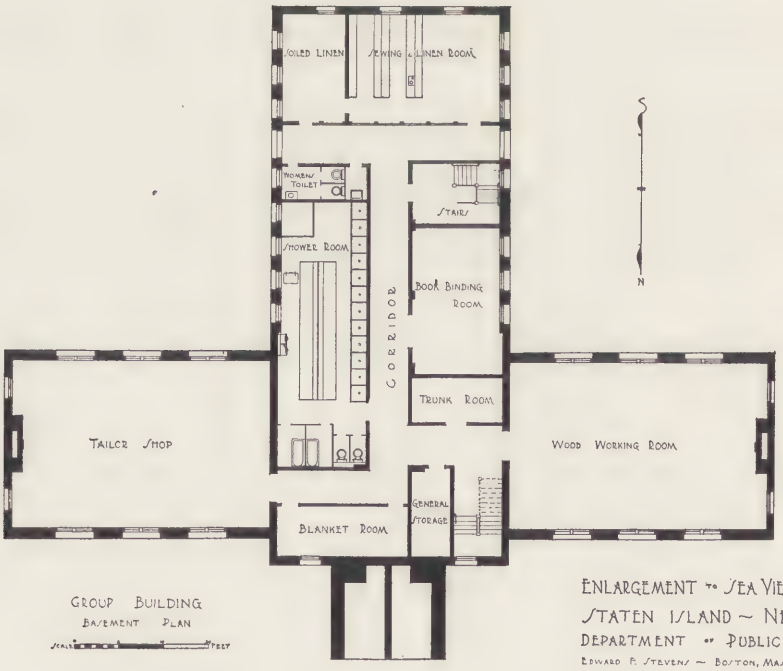
SCALE FEET

ENLARGEMENT TO SEA VIEW HOSPITAL
STATEN ISLAND — NEW YORK
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EDWARD P. STEVENS — BOSTON, MASS. } ASSOCIATED
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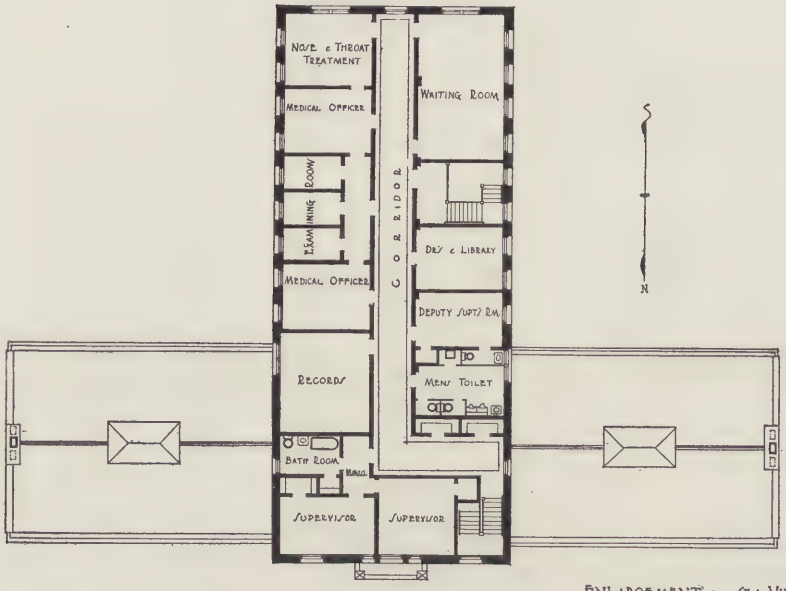
GROUP BUILDING
FIRST FLOOR PLAN
SCALE 0 10 20 30 40 FEET

ENLARGEMENT TO SEA VIEW HOSPITAL
STATEN ISLAND — NEW YORK
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EDWARD P. STEVENS — BOSTON, MASS. } ASSOCIATED
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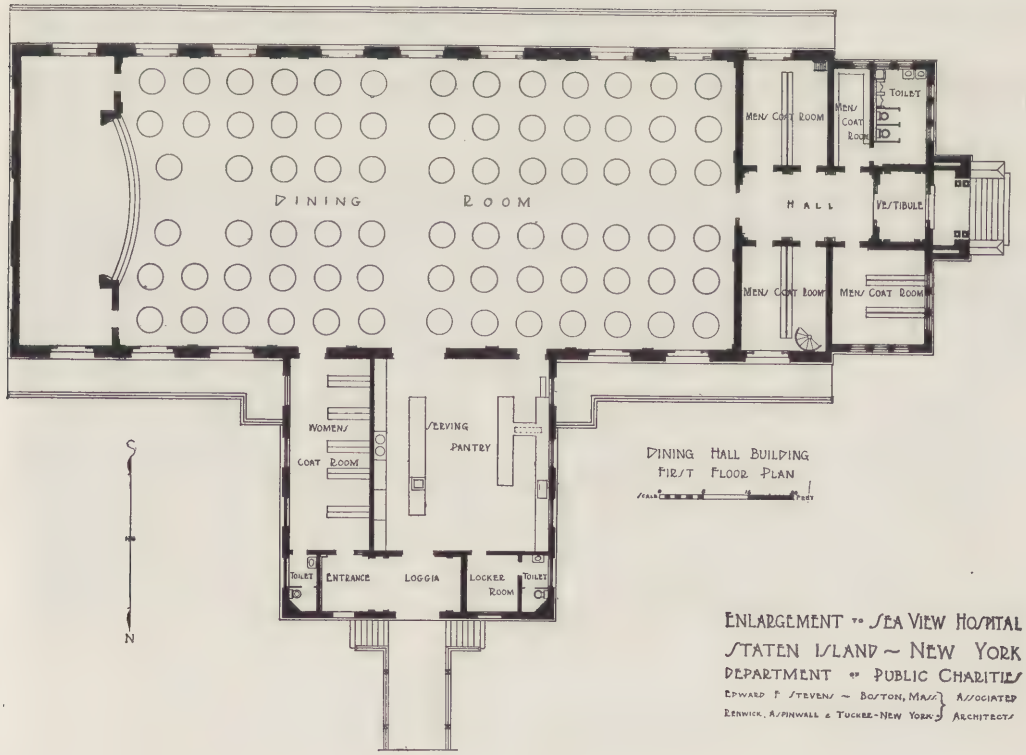
GROUP BUILDING
BASEMENT PLAN
SCALE 0 10 20 30 40 FEET

ENLARGEMENT TO SEA VIEW HOSPITAL
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GROUP BUILDING
SECOND FLOOR PLAN.

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DINING HALL BUILDING
FIRST FLOOR PLAN

ENLARGEMENT TO SEA VIEW HOSPITAL
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RENWICK, ASPINWALL & TUCKER ~ NEW YORK } ARCHITECTS



HOLY TRINITY RECTORY, HACKENSACK,
N. J. RAPHAEL HUME, ARCHITECT.





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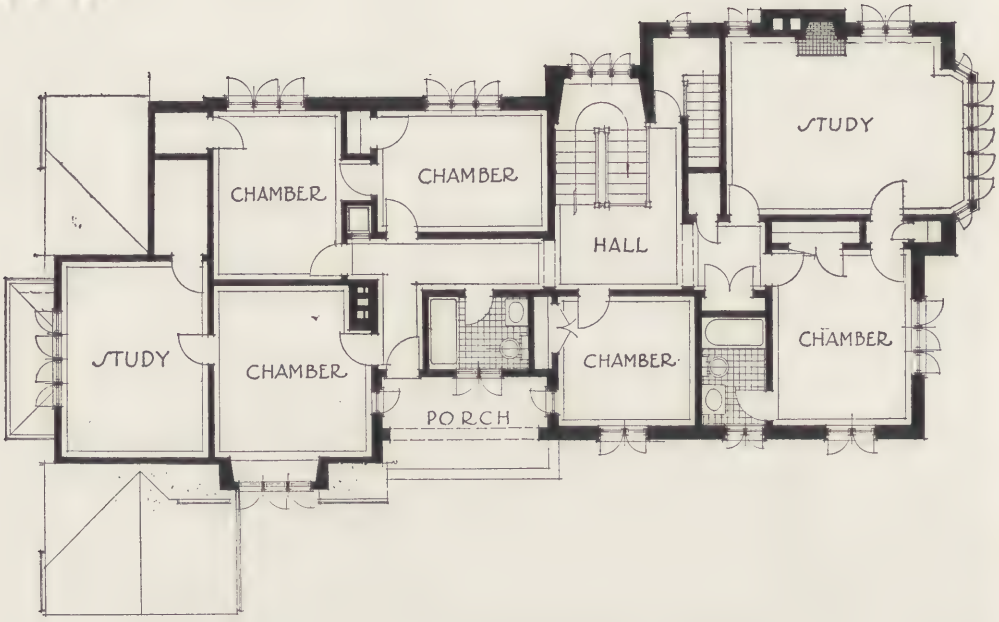
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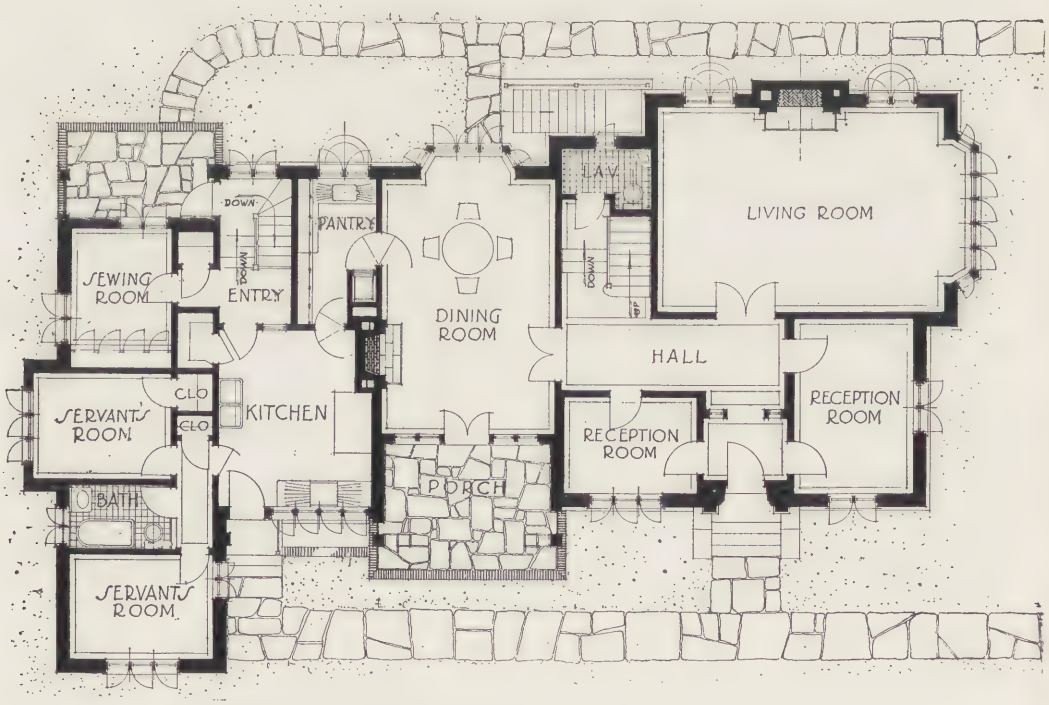
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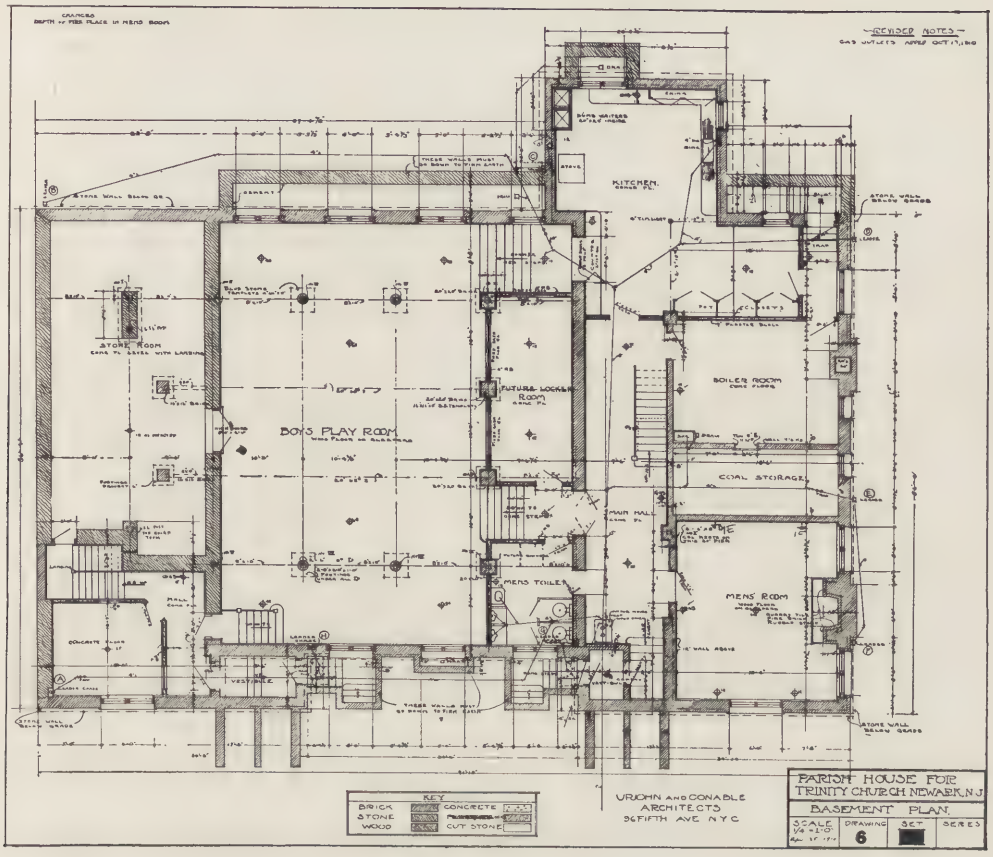
HOLY TRINITY RECTORY, HACKENSACK,
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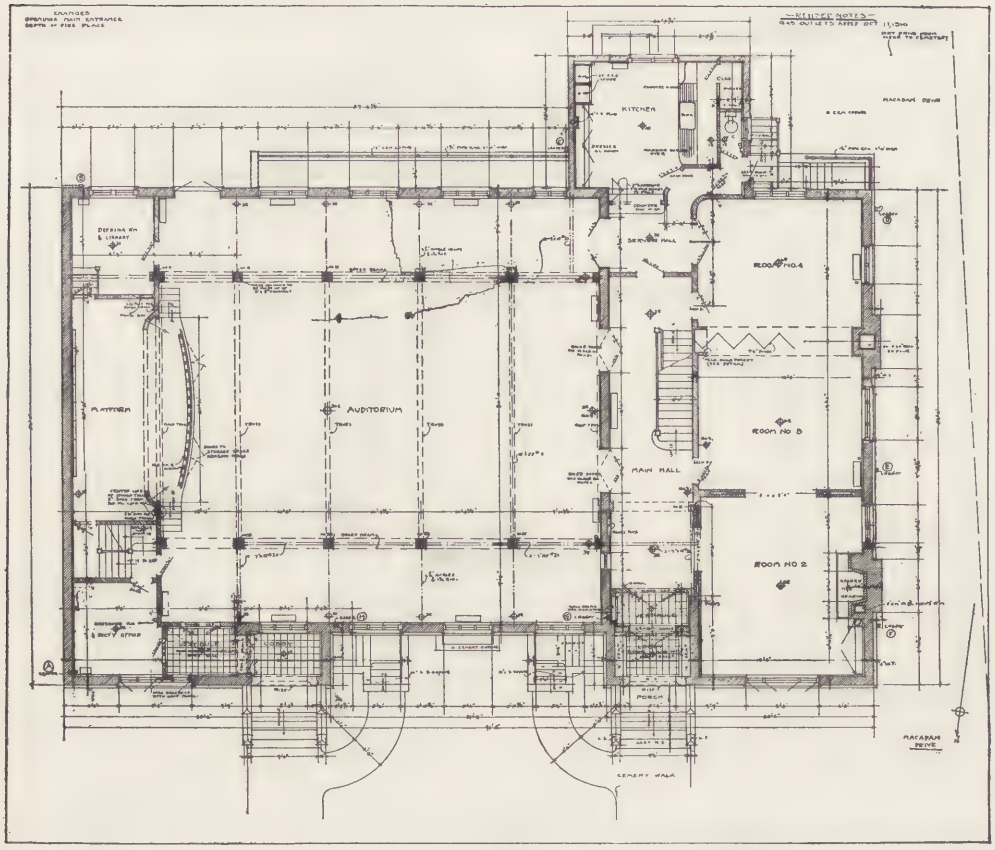
SECOND FLOOR PLAN—HOLY TRINITY RECTORY, HACKENSACK, N. J.
Raphael Hume, Architect.



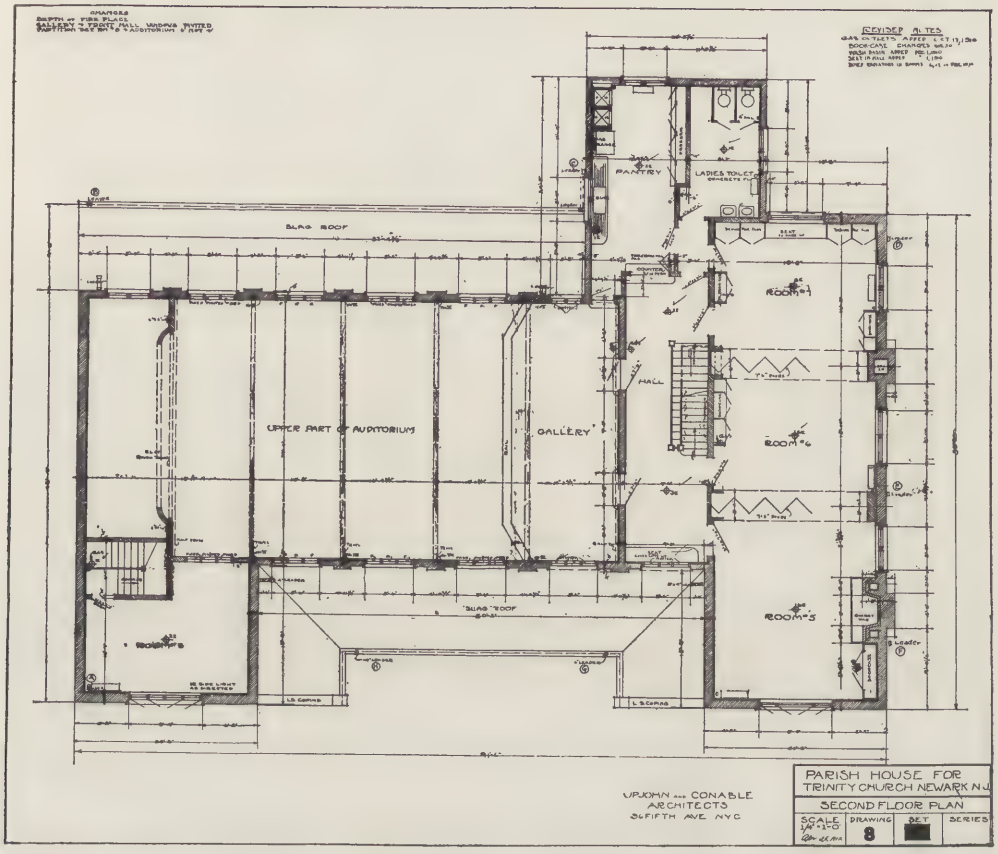
FIRST FLOOR PLAN—HOLY TRINITY RECTORY, HACKENSACK, N. J.
Raphael Hume, Architect.



BASEMENT PLAN—TRINITY PARISH HOUSE, NEWARK, N. J. UPJOHN & CONABLE, ARCHITECTS.



FIRST FLOOR PLAN—TRINITY PARISH HOUSE, NEWARK, N. J. UPJOHN & CONABLE, ARCHITECTS.



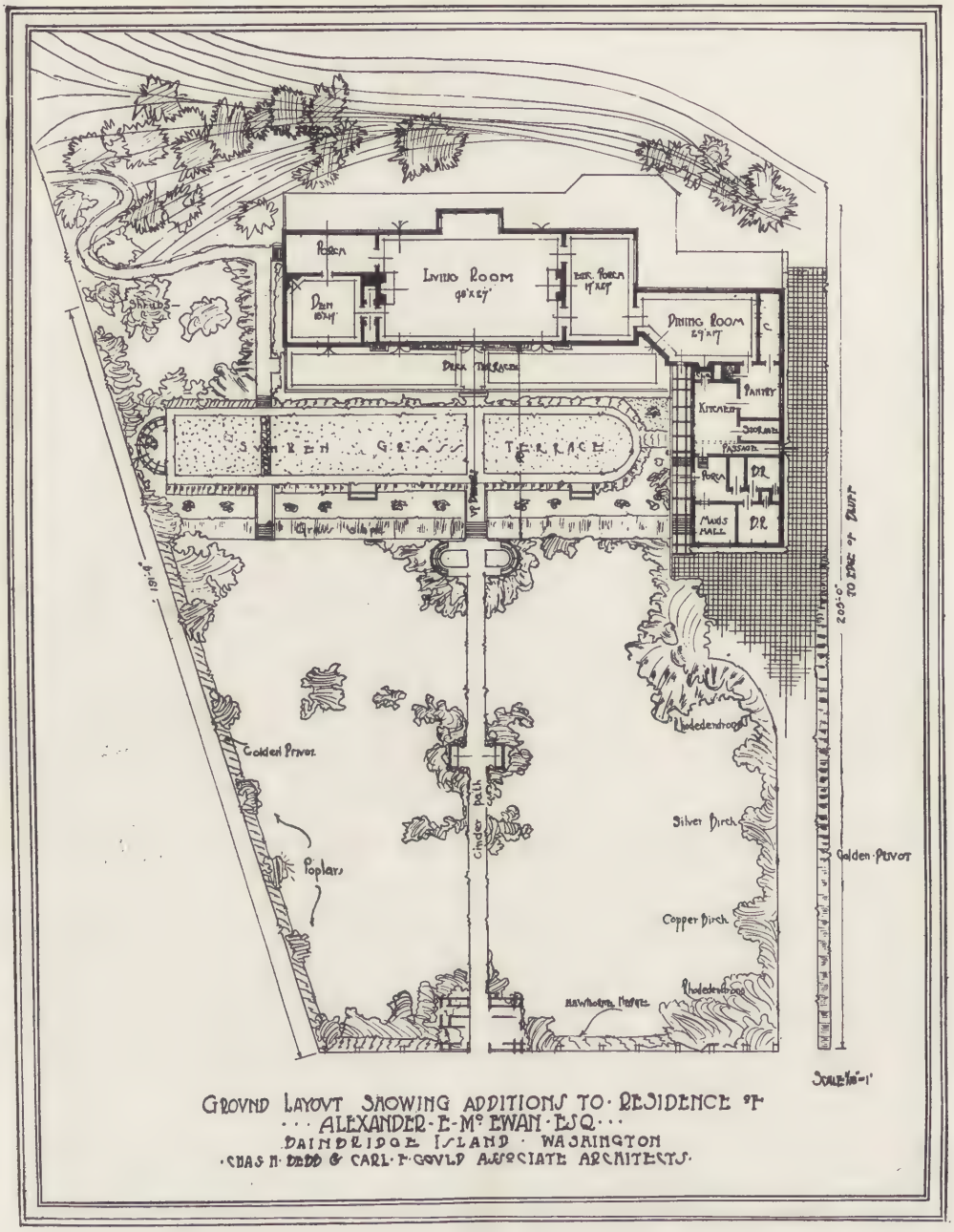
SECOND FLOOR PLAN—TRINITY PARISH HOUSE, NEWARK, N. J. UPJOHN & CONABLE, ARCHITECTS.



TRINITY PARISH HOUSE, NEWARK, N. J.
UPJOHN & CONABLE, ARCHITECTS.



TRINITY PARISH HOUSE, NEWARK, N. J.
UPJOHN & CONABLE, ARCHITECTS.



GROUND LAYOUT, SHOWING ADDITIONS TO RESIDENCE OF ALEXANDER E. McEWAN, ESQ., COUNTRY CLUB, BAINBRIDGE ISLAND, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



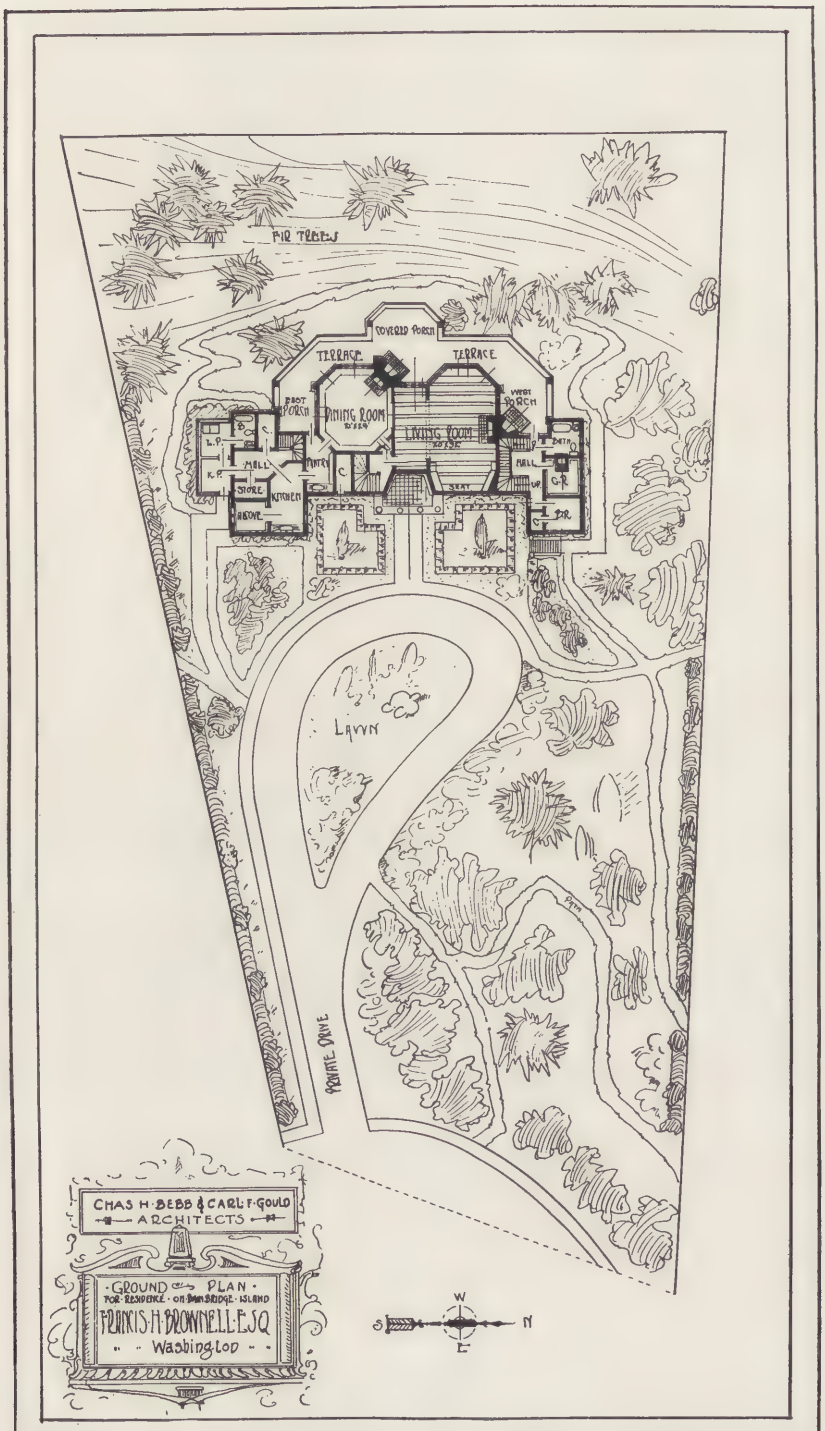
RESIDENCE OF ALEXANDER E. McEWAN, ESQ., COUNTRY CLUB, BAINBRIDGE ISLAND, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



SOUTH ELEVATION—RESIDENCE OF FRANCIS H. BROWNELL, ESQ., COUNTRY CLUB, BAINBRIDGE ISLAND, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



NORTH ELEVATION—RESIDENCE OF FRANCIS H. BROWNELL, ESQ., COUNTRY CLUB, BAINBRIDGE ISLAND, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



GROUND PLAN—RESIDENCE OF FRANCIS H. BROWNELL, ESQ., COUNTRY CLUB, BAINBRIDGE ISLAND, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



LIVING ROOM—RESIDENCE OF FRANCIS H. BROWNELL, ESQ., COUNTRY CLUB, BAINBRIDGE ISLAND, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD F. BACH

Curator, School of Architecture, Columbia University

Part VI.—Periodicals

ONLY in recent years have the periodical publications given due attention to our Colonial heritage. Owing to the increasing interest in the field manifested by architects and historians, chiefly as indicated in the earlier works on the firstlings of American architecture, decoration and furniture, noticed in preceding parts of this series of papers, the monthly and other periodicals ultimately saw a gratifying field for exploitation. Because of the deficiency in authoritative information in many directions of interest fostered by the newly discovered riches, the Colonial field lent itself, particularly well at first, to the sort of treatment that the magazines were able to offer. Later, however, when our formative architecture came to its own, in general estimation, the requisite space for detailed studies made possible by increased information available could not be granted. The result was promptly seen in the superficial treatments given a number of worthy subjects on the one hand, and on the other in the greatly improved treatment given to the smaller matters of more intimate detail at first necessarily slurred over. As the interest in architecture grew, that in the minor arts, from wallpaper to glassware, from garden fences to stove plates, soon kept pace, so that we may safely say that the periodicals served to bring to light a vast store of information otherwise lost to us and of insufficient compass or interest to warrant its publication in book form. The architectural papers themselves ultimately began to issue measured drawings, and this type of treatment has latterly characterized most of their articles in this field.

The magazine articles for our purposes are chiefly of three kinds: those in architectural periodicals; those in periodicals maintaining the domestic or home building and decoration interest; and those issued by historical and other societies. In the first group are to be included the Architectural Record, the American Architect, the Architectural Forum (formerly the Brickbuilder) as the chief exponents. In the second group

are to be included magazines of the type of Country Life in America, House and Garden, The House Beautiful, and similar publications. In the last belong the proceedings of historical societies, such as the Massachusetts Historical Society, to mention but one of a large number, and the bulletins of organizations such as the Municipal Art Society of Hartford, Connecticut, which devotes itself to the maintenance of landmarks as well as to the present beautification of its home city. So far as we can say at the moment, but one society has definitely dedicated itself to the preservation of antiquities and has undertaken to issue a regular publication outlining the results of its efforts; this is the Society for the Preservation of New England Antiquities.

Of the first two groups mentioned, the former obviously must provide the greater interest for us at present, and it should be said that the architectural papers have been particularly careful and far-seeing in ministering to the architects' need for measured drawings of Colonial buildings. In a number of cases such measured drawings are no doubt the only existing detailed record of buildings now gone, through the neglect which characterizes our attitude toward so many of our landmarks. The second group, to be sure, does not lack in interest, but there must necessarily be in some cases —in fact, in most cases—a more or less popular aspect as the basis of appeal. As a consequence these papers are apt to show better or more numerous photographs, and, above all, a better treatment of objects of very minor interest. In addition, the whole field of the minor arts has been left entirely to these publications and has by them been handled in excellent fashion.

In the appended bibliography we can offer but a selection of the material which has appeared in the various types of periodicals above mentioned. The selection of the articles has been controlled by various considerations; text interest, photographic reproductions, measured drawings, unusual views of details, buildings not generally reproduced—any of these might encourage the inclusion of an article which as a whole might seem to offer but meagre interest. The following periodicals have been consulted in their entirety: The Architectural Record, the American Architect and Building News, now the American Architect, the Architects' and Builders' Magazine, now Architecture and Building, the Brickbuilder, now the Architectural Forum, the Architectural Review (Boston), and the Journal of the American Institute of Architects. Practically all articles in our field appearing in these periodicals have been included in this list. In the following cases selections were made: Country Life in America, House and Garden, The House Beautiful, American Homes and Gardens, Arts and Decoration. In addition occasional papers from the Magazine of American History, Art and Archeology, the Harvard Architectural Quarterly and from one or two of the more popular and chiefly literary periodicals have also been included. Obviously, in view of what has been said above, not voluminous completeness, but rather decided interest, has served as guide. It should also be stated that since our chief interest is architectural, or at least has to do with arts allied to architecture, certain aspects of the minor arts have not been covered in the appended lists; this applies to textiles and in certain degree likewise to tableware and the like.

A Bibliography of the Literature of Colonial Architecture. Part VI.—Articles in the Periodicals.

1. General Articles.

Bessell, Wesley Sherwood. Colonial Architecture in Connecticut, Text and Measured Drawings, in *The Architectural Record*, 5 parts; (1) vol. 37, No. 4, Apr., 1915, pp. 361-369, ill.; (2) vol. 37, No. 5, May, 1915, pp. 445-452, ill.; (3) vol. 37, No. 6, June, 1915, pp. 547-556, ill.; (4) vol. 38, No. 6, Dec., 1915, pp. 672-680, ill.; (5) vol. 39, No. 1, Jan., 1916, pp. 53-64, ill.

Black, Wm. Nelson. Colonial Building in New Jersey, in *The Architectural Record*, vol. 3, No. 3; Jan.-Mar., 1894; pp. 245-262, ill.

Blackall, Clarence H. Good and Bad Colonial Architecture, in *The Architectural Review*, vol. 1, 1899; pp. 1-5, 13-18, ill.

Cervin, O. Z. The So-called Colonial Architecture of the United States, in *The American Architect and Building News*, 7 parts; Part 1: vol. xlviii, No. 1012, May 18, 1895,

pp. 63-65, ill. Part 2: vol. xlviii, No. 1013, May 25, 1895, pp. 75-77, ill. Part 3: vol. xlviii, No. 1014, June 1, 1895, pp. 87-88, ill. Part 4: vol. xlviii, No. 1015, June 8, 1895; pp. 97-99, ill. Part 5: vol. xlviii, No. 1016, June 15, 1895; pp. 107-108, ill. Part 6: vol. xlviii, No. 1917, June 22, 1895; pp. 115-118, ill. Part 7: vol. xlviii, No. 1018, June 29, 1895; pp. 130-131, ill.

Eberlein, Harold Donaldson. Three Types of Georgian Architecture, in *The Architectural Record,* vol. 34, July, 1913, No. 1, pp. 56-57, ill.; vol. 37, No. 2, Feb., 1915, pp. 159-176, ill.

Fitz-Gibbon, Costen. Architectural Philadelphia—Yesterday and To-day, in *The Architectural Record,* vol. xxxiv, No. 1, July, 1913; pp. 20-45, ill.

Fowler, Robert Ludlow. Historic Houses and Revolutionary Letters, in *The Magazine of American History,* vol. 24, No. 2, Aug., 1890; pp. 81-100, ill.

Mason, George C., Jr. Colonial Architecture. A Preliminary Report presented to the Annual Convention of the American Institute of Architects, in *The American Architect and Building News,* Part 1, vol. 10, No. 294, Aug. 13, 1881; pp. 71-74, ill. Part 2, vol. 10, No. 295, Aug. 20, 1881; pp. 83-85, ill.

Middleton, G. A. T. English "Georgian" Architecture, the Source of the American Colonial Style, in *The Architectural Record,* vol. 9, No. 2, Oct., 1899; pp. 97-114, ill.

Pressey, Park. Preserving the Landmarks, in *The House Beautiful,* vol. 36, No. 4, Sept., 1914; pp. 97-100, ill.

Robie, Virginia. A Colonial Pilgrimage, in *The House Beautiful.* Part 1: vol. 15, Jan. 1904; pp. 77-83, ill. Part 2: vol. 15, Feb. 1904; pp. 171-175, ill. Part 3: vol. 15, April, 1904; pp. 315-317, ill. Part 4: vol. 16, No. 3, Aug., 1904; pp. 13-15, ill.

Rowe, Henry W. Reflections Gleaned from a Colonial Scrap-book, in *The American Architect,* vol. 109, No. 2101, March 29, 1916; pp. 202-207, ill.

Schuyler, Montgomery. Education of a Colonial Carpenter, in *The Architectural Record,* vol. 19, No. 3, March, 1906; pp. 227-229.

Schuyler, Montgomery. A History of Old Colonial Architecture, in *The Architectural Record,* vol. 4, No. 3, January-March, 1895; pp. 312-366, ill.

Wallis, Frank E. The Case for the Colonial: What and Why Is Colonial Architecture? in *House and Garden,* vol. 16, No. 6, December, 1909; pp. 188-192, ill. Photographs by Frank Cousins and others.

2. Churches.

Desmond, H. W. A Forgotten Colonial Church, in *The Architectural Record,* vol. 14, No. 2, Aug., 1903; pp. 94-106, ill.

Dow, Joy Wheeler. American Renaissance Steeples, in *The Architect's and Builder's Magazine,* new series, vol. 6, No. 3, Dec., 1904; pp. 122-131. Vol. 6, No. 4, January, 1905; pp. 162-172, ill.

Embury, Aymar II. Early American Churches, in *The Architectural Record,* 2 parts. Vol. 30, No. 6, Dec., 1911; pp. 584-596, ill. Vol. 31, Nos. 1, 2, 3, 4, 5, 6, Jan.-June, 1912; pp. 57-67, 153-163, 256-266, 546-556, 628-637, ill. Vol. 32, Nos. 1, 2, 3, 5, July, Aug., Sept., Nov. 1912; pp. 80-90, 158-168, 256-266, 453-463, ill.

Gardner, G. R. Some Remodelled Colonial Churches, in *The American Architect and Building News,* vol. 76, No. 1375, May 3, 1902; pp. 37-38, 6 pl.

Grant, Charles C. Rebuilding of the First Congregational Church of Williamstown, Mass., in *The Architectural Record,* vol. 32, No. 4, Oct., 1915; pp. 249-257, ill.

Lynch, Frederick. The Church on the Lenox Hilltop and Round About It, in *The New England Magazine,* new series, vol. 23, No. 2, Oct., 1900; pp. 192-211, ill.

3. Public and Other Secular Buildings, Excluding Dwellings.

Bibb, A. Burnley. The Restoration of the White House, in *House and Garden,* vol 3, No. 3, March, 1903; pp. 127-139, ill.

Colonial Capitol of Virginia, The, in *The American Architect and Building News,* vol. 16, No. 461, Oct. 25, 1884; pp. 198-199, ill.

Dykeman, J. L. The New York State National Bank, Philip Hooker, Architect, 1803, in *Architecture,* vol. 34, No. 6, Dec., 1916; pp. 271-272 and pl. 191, 192.

Fox, Thomas A. A Brief History of the Beacon Hill State House, in *The American Architect and Building News,* vol. 48, No. 1018, June 29, 1895; pp. 127-129.

Ghequiere, T. Buckler. Richmond County Court House, Virginia, in *The American Architect and Building News,* vol. 2, No. 78, June 28, 1877; p. 199, ill., plan.

Jelliffee, L. C. The Octagon, Headquarters of the American Institute of Architects, in *The Architects' and Builders' Magazine,* vol. 3, No. 12, Sept., 1902; pp. 440-442, ill.

Kimball, Sidney Fiske. The History and Monuments of Our National Art, in *Art and Archaeology,* vol. 4, No. 3, Sept., 1916; pp. 161-168, ill.

Kimball, Sidney Fiske. Thomas Jefferson and the First Monument of the Classic Renaissance in America, in *The Journal of the American Institute of Architects,* three parts. Part 1, vol. 3, No. 9, Sept., 1915; pp. 370-381, ill. Part 2, vol. 3, No. 11, Oct., 1915; pp. 421-443, ill. Part 3, vol. 3, No. 11, Nov., 1915; pp. 473-491, ill.

May, Charles C. New York City Hall, in *The Architectural Record,* vol. 39, Nos. 4, 5, 6, April, May, June, 1916; pp. 309-319, 474-490, 513-535, ill.

McQuade, Walter. Measured Drawings of City Hall, in Series of Measured Details,

in *Architecture,* vol. 35, No. 1 to date, frontispiece, Jan. to date, 1917. Still in course of publication.

Schuyler, Montgomery. The Architecture of American Colleges, part 8, including William and Mary (1693), St. John's College, Annapolis (1698-1784), University of Georgia (1785), University of North Carolina (1789), University of Virginia (1819), in *The Architectural Record,* vol. 30, No. 1, July-Dec., 1911; pp. 57-84, ill.

Schuyler, Montgomery. The Restoration of Fraunce's Tavern, in *The Architectural Record,* vol. 24, No. 6, Dec., 1908; pp. 444-448, ill.

White, Richard Grant. Old Public Buildings in America, in *The Century Magazine,* vol. 27, No. 5, March, 1884; pp. 677-688, ill.

Wilde, Edward S. The New York City Hall, in *The Century Magazine,* vol. 27, No. 6, April, 1884; pp. 865-872, ill.

4. Domestic Architecture. New England Dwellings.

Bragdon, Claude Fayette. Six Houses in Salem, in *The American Architect and Building News,* vol. 39, No. 891, January 21, 1893; pp. 41-43, ill.

Brown, Frank Choteau. The Old "Judge Lee" House, Cambridge, Mass, in *The Architectural Review,* vol. 4, No. 5, May, 1916, pp. 77-78, ill.

Dow, Joy Wheeler. A Salem Enchantment, in *The House Beautiful,* vol. 12, No. 6, Nov., 1902; pp. 334-344, ill.

Dow, Joy Wheeler. Doorways of the Bristol Renaissance, in *The Architectural Review,* vol. 8, No. 3, March, 1901; pp. 28-30, ill.

The Elton House at Litchfield, Conn, in *Country Life in America,* vol. 31, No. 1, Nov., 1916; p. 43, ill.

Gardener, G. C. Colonial Architecture in Western Massachusetts, in *The American Architect and Building News,* in three parts. Part 1, vol. 45, No. 977, Sept. 15, 1894; pp. 99-100, ill. Part 2, vol. 46, No. 988, Dec. 1, 1894; pp. 89-90, ill. Part 3, vol. 47, No. 996, Jan. 26, 1895; pp. 39-41, ill.

Georgian Houses of New England, in *The American Architect and Building News,* in two parts. Part 1, vol. 2, No. 95, Oct. 20, 1877; pp. 338-339. Part 2, vol. 3, No. 112, Feb. 16, 1878; pp. 54-55.

Hall, Gertrude, The Charm of Old Duxbury; A Historic Massachusetts Bay Town and its Delightful Old and New Houses, in *Indoors and Out,* vol. 2, No. 4, July, 1903; pp. 161-169, ill.

Hokanson, O. M. The Colonial Architecture of Norwich, in *The American Architect and Building News,* vol. 5, No. 10, Aug., 1904; pp. 465-470, ill.

Hulbert, Jeanette L. A Remodeled Cape Cod Farmhouse, photographs by Mary H. Northend, in *American Homes and Gardens,* vol. 12, No. 8, Aug., 1915; pp. 272-274, ill.

Isaac Royall House, on the "Plantation," Medford, Massachusetts, in *The American Architect and Building News,* vol. 24, No. 668, Oct. 13, 1888; pp. 171-172, ill.

Kellogg, Alice M. A Seventeenth Century Homestead, in *American Homes and Gardens,* vol. 6, No. 2, Feb., 1909; pp. 66-69, ill.

Lawrence, C. A. Longfellow's Wayside Inn, in *Arts and Decoration,* vol. 6, No. 12; Oct., 1916; pp. 548-551, ill:

Northend, Mary Harrod. A House with a History, in *American Homes and Gardens,* vol. 9, No. 4; April, 1912; pp. 128-131, ill.

Northend, Mary Harrod. A Remodeled House Designed for Picturesque Effect, in *American Homes and Gardens,* vol. 2, No. 8, Aug., 1914; pp. 255-258, ill.; photos by the author.

Northend, Mary Harrod. The Dorothy Quincey House, in *House and Garden,* vol. 25, No. 2, Feb., 1914; pp. 97-101, ill.

Northend, Mary Harrod. The Historic Wentworth House, in *American Homes and Gardens,* vol. 5, No. 3, March, 1908; pp. 106-109, ill. by photos by the author.

Northend, Mary Harrod. The Ladd-Gilman House, Exeter, New Hampshire, in *American Homes and Gardens,* vol. 2, No. 12, Dec., 1914; pp. 409-415, ill. by photos by the author.

Northend, Mary Harrod. The Pierce-Nichols House at Salem, in *American Homes and Gardens,* vol. 12, No. 6, June, 1915; pp. 183-187, ill.

One of the Oldest Houses in New England, The Spences House (1651), Newbury, Mass., in *Country Life in America,* vol. 30, No. 2, June, 1916; pp. 38-39, ill.

Riley, Phil M. Inside a McIntire House, in *Country Life in America,* vol. 24, No. 6, Oct., 1913; pp. 52-54, ill., photos by Frank Cousins.

Riley, Phil M. In the Spirit of Old Salem, in *The House Beautiful,* vol. 39, No. 3, Feb., 1916; pp. 72-74, ill.

Schweinfurth, J. A. Nantucket Revisited, in *The American Architect,* vol. 110, No. 2134, Nov. 15, 1916; pp. 301-308, 311-313, ill. by sketches by the author.

Shelton, Louise. The Garden at Hamilton House, in *American Homes and Gardens,* vol. 6, No. 11; pp. 422-425, ill.

Sturgis, R. Clipston. Two Old New England Houses, in *House and Garden,* vol. 4, No. 1, July, 1903; pp. 20-27, ill.

Upjohn, R. M. Colonial Architecture of New York and the New England States, in *Proceedings* of the Third Annual Convention of the *American Institute of Architects,* New York, Nov. 16 and 17, 1869; pp. 47-51.



Maya Decoration Applied.

An article I had the honor to contribute to this magazine in June, 1915, contained (page 545) some slight mention of modifications introduced by the native artisans into Spanish-Colonial architecture; and I wrote then that "a tendency plainly discernible in recent years—this conclusion based upon my own observations in Mexico and other Latin American countries—gives most positive assurance of the revival of ideals in art that prevailed before the conquest: a Nahuatl-Aztec Renaissance." Now I ask: Is it possible, and will it be convenient, to employ, for the solution of some of our modern architectural problems, a few of the many rich and classically valuable motives of the aboriginal or pre-Columbian period of American architecture?

I beg leave to suggest that it may be both possible and highly advantageous; and this suggestion includes, naturally, not alone the art of the Aztec group, but also the ancient Maya architecture in southeastern Mexico and northern Central America—throughout that home of an ancient though "New World" culture in which we find that the leading art-motives are faunal and merely decorative, rather than the much more truly structural motives which the Greeks, for example, derived from observation of the forms of the vegetable kingdom. If we may at this point reach down into the very heart of our subject, let it be by way of the following observation: Just as truly as pure Greek architecture and some of its derivatives stood for ideals of permanence with tranquillity, even so truly did the pre-Columbian aboriginal architecture represent too often seemingly unavailing struggles and change; but the architects of prehistoric structures in our New World also, in their own way, aimed at an architectural effect of tranquillity and stability: they strove to offset the implication of the movement, of the restless activity of their faunal decorations, by creating edifices of the most substantial design known to man—the pyramidal structures that we find in many parts of the region extending from south-central Mexico well into the desert on the South American west coast.

An interesting example of the application of the pre-Columbian Maya art to a modern structure is the monument designed by Señor Ignacio Brugueras, who has held the distinguished office of Chief of the Division of Architecture, Department of Public Works, in the Republic of Salvador, Central America. The announcement of a competition for a monument to "perpetuate the glory of the independence of Guatemala" occasioned the preparation of the original drawing, and we understood that its approval, by the president of the republic chiefly interested, as a part of the general plan for beautifying the capital, Guatemala City, led to the completion of the design (the model shown in the accompanying illustration). Señor Brugueras evidently derived his inspiration for this work from authentic Maya sources; his aim was also to reproduce some of the most attractive effects of Romanesque art without its austerity.

The length of the platform pyramid is given as forty feet, and the height of the structure about twenty-three feet; the material, granite of the same character as that of the ruins at Quiriguá, Guatemala. A structural elliptic wall—the essential feature of the principal façade—offers surfaces for low-reliefs in the antique Maya fashion and for mouldings which, at the base, can be used as seats. At the upper extremity the finial mouldings (resembling a Grecian fret) give one the impression of a lightly silhouetted line which detaches itself with delicate contours upon the sky. In the ancient ruined city of Chichén-Itzá, in



ACCEPTED DESIGN FOR MONUMENT TO COMMEMORATE THE INDEPENDENCE OF GUATEMALA.
Ignacio Brugueras, Architect.

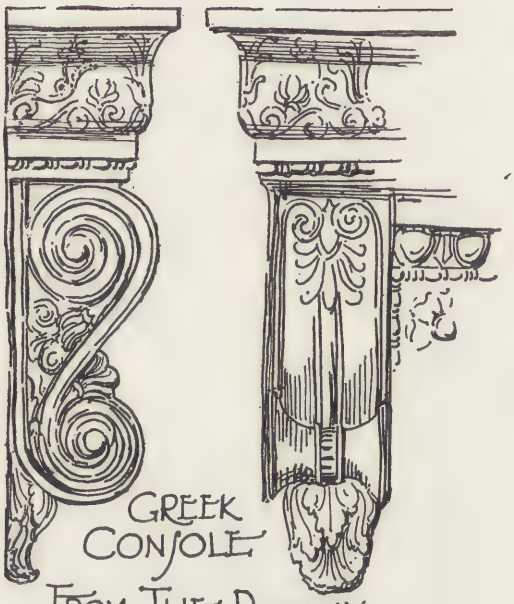
Yucatan, Mexico, were quite certainly found the prototypes of the finial mouldings and also of the stylized jaguar heads shown in the Brugueras monument. Large pilasters adorning the elliptical wall mentioned above and breaking the monotony of the moulding courses are designed to reproduce essentially the obelisk-like characteristics of ancient monoliths now preserved in the museum of Guatemala. As for the lighting of the monument and its surroundings, that is provided for in the two great lamps upheld by standards of wrought iron—pentagonal lamps, shaded by colored glass plates, each bearing the coat-of-arms of one of the five Central American republics.

To us it seems that the effort to perpetuate the memory of Guatemala's liberation may have a further result: It may serve, in some degree at least, to popularize really interesting creations — typical and original creations — of native American architects and builders whose names we have never known. MARRION WILCOX.

The Console.

Of the many architectural forms that have been inherited by us from the French, perhaps none is in more common use than the "console." During the past hundred years the term has been frequently employed by the English-speaking architect to signify a supporting architectural member that projects half its height or less, or a bracket of any kind. Most frequently, however, the term is meant to convey the idea of a supporting brace in the form of a reverse scroll or letter S.

Prototypes of the console are found in the work of the preclassic builders. As the scroll of double curvature early acquires a place in the line repertoire of any beginner in the graphic arts, whether child or savage, it is not surprising that the most ancient historic styles should exhibit this design; it is seen in the Assyrian wave pattern, in the Persian scroll and in the Egyptian lotus capital. However, it remained for the Greeks to evolve the console as a perfected architectural form. With their pure marble and delicate sense of the beautiful in line and form, they produced such examples as are to be found supporting the entabla-



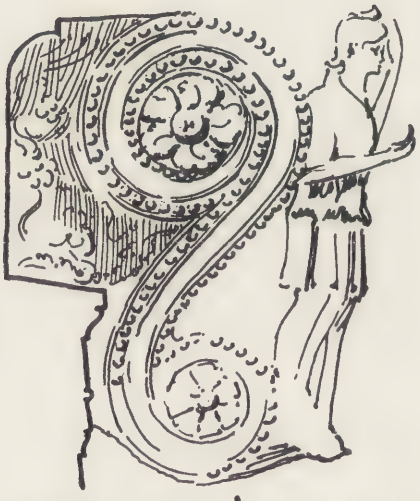
GREEK CONSOLE
FROM THE DOORWAY OF THE ERECHTHEVM.



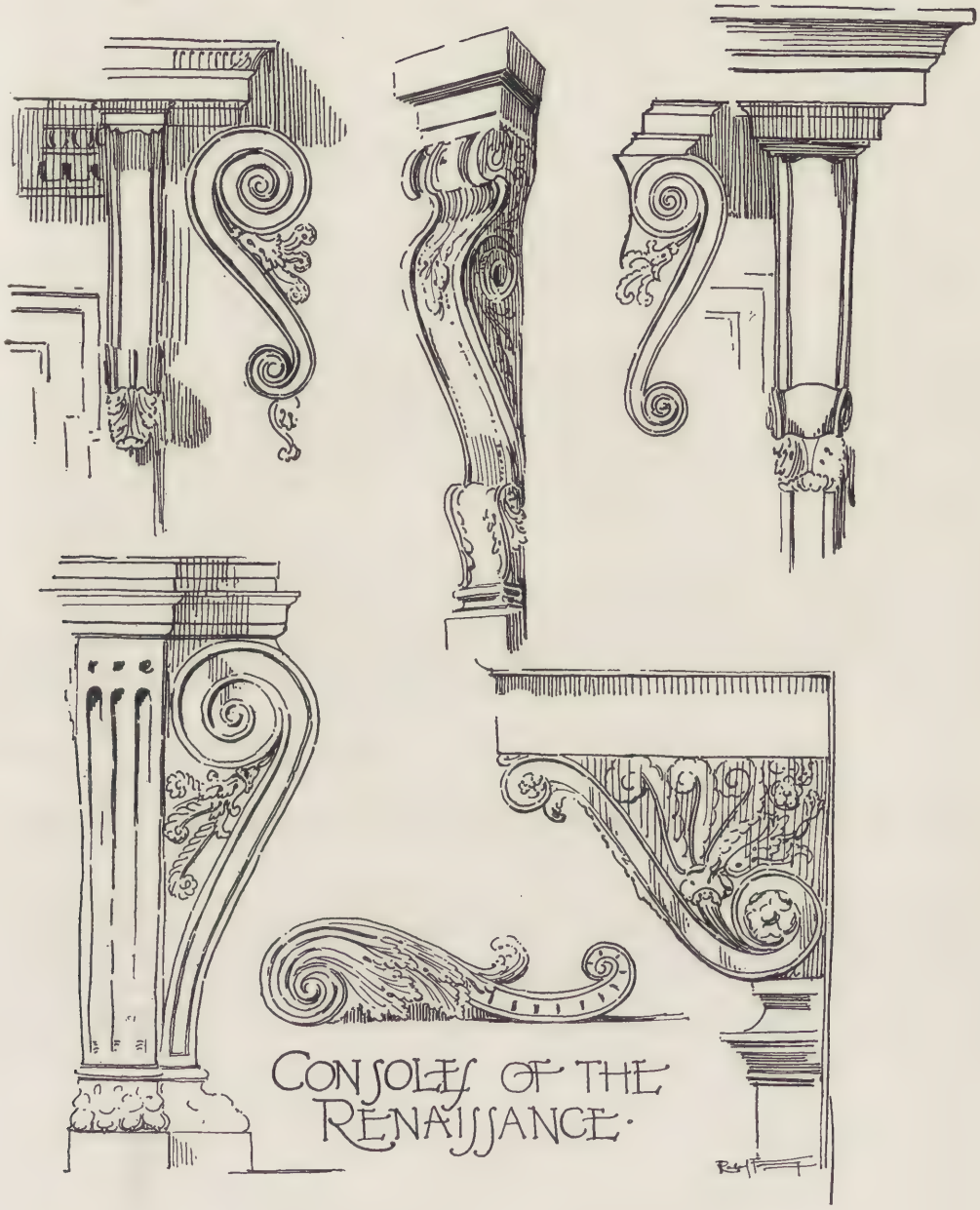
FROM THE TEMPLE OF JUPITER



ROMAN CONSOLE.



FROM THE ARCH OF TITUS
ROME.



CONSOLES OF THE RENAISSANCE.

ture over the doorway of the Erechtheum. Here the delicacy of Greek ornamentation with bead and honeysuckle was wedded to the subtle curvature of the reverse scroll to produce a member at once ornate and functional.

The Romans, conquering the Grecian lands, were in turn conquered by Greek art. The volute console, although very beautifully developed by the Greeks, had been used by them but rarely. The Romans adopted it extensively, and were the first to employ it in a recumbent position in the bands supporting the projecting cornices of the Ionic and Corinthian orders and under projecting balconies.

During the art decline of the dark ages crude copies were made of antique consoles. These are often seen in the remains of the Early Christian and Romanesque art periods. They were followed by the Gothic bracket, so often seen in cathedrals supporting the statues of saints.

The Renaissance builders returned to the classic example of the console, remodeling and utilizing the motive with rich variety. The console was wisely handled until the extravagance of the Barocco and Rococo periods demoralized Renaissance art. The constructive purpose was wholly sacrificed for richness of design.

The console can be used in novel places and in a great variety of dimensions. Braces for supporting members, copings for walls and raking cornices for pediments are seen moulded into this form of double curvature. While countless examples of its employment as a supporting member have established its prestige as such, analysis of the form itself gives little idea of efficient bearing power. Rather its lines tend to form a happy transition between the horizontal and the vertical, and lend themselves to ornate and graceful decoration. As an agent for the sympathetic unifying of diverse elements, rather than as a frankly distinct support in a constructional sense, has the console played its important role in the long procession of architectural styles.

RALPH FANNING.



SUN-DIAL AT WASHINGTON UNIVERSITY.

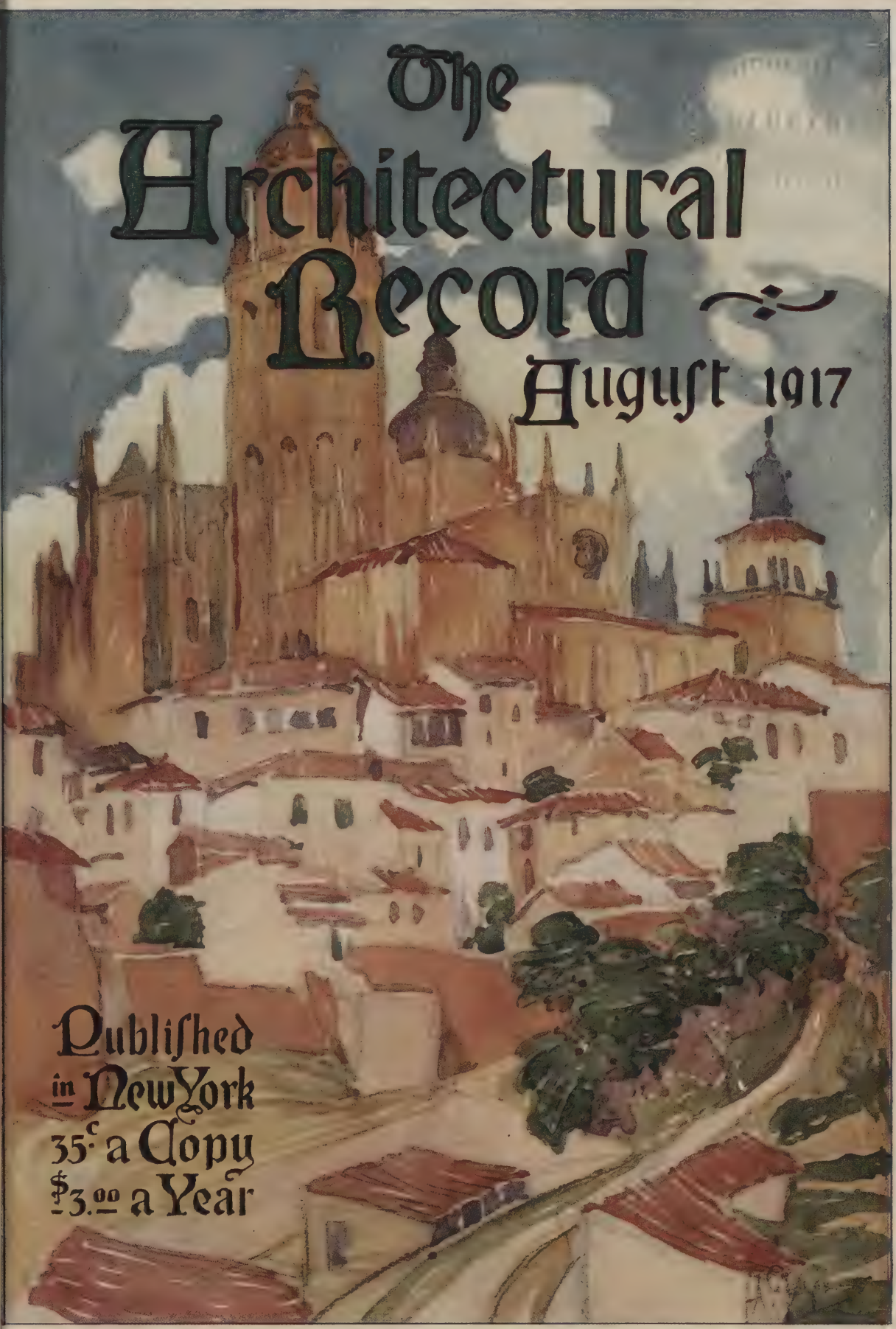
A Novel Sun-dial at Washington University.

A sun-dial built of stone has been placed at the top of the "Cupples I" Building, which houses the School of Architecture at Washington University, St. Louis, Mo. As the dial is of the vertical type, and faces south, the sun shines upon it at all hours of the day. The numerals are large enough to be recognized at a distance of several hundred feet. At the time the photograph was taken the sun-dial registered eleven o'clock.

K. M. COGGESHALL.

The Architectural Record

August 1917



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THE ARCHITECTVRAL RECORD

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ENTRANCE FROM LOGGIA—ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.

THE ARCHITECTVRAL RECORD

VOLVME XLII — NVMBER II

AVGVST, 1917

THE·PRIVATE·ART·GALLERY OF·BRECKINRIDGE LONG·ESQ

ST. LOVIS. MISSOVRI

GVY STVDY. ARCHITECT

COOPERATION of architect with painter or sculptor is often insisted on in principle, but is too often omitted in practice. However, there is now an increasing group of men who are skilled in the various types of decoration, whether in arts like sculpture or mural painting, or in crafts like metal or woodwork or furnishings, and most architects welcome the aid of such co-workers. They have found it possible to seek out carvers and modelers who will produce finely wrought details—a marble mantel or an inscribed memorial—working from the architect's sketch, sometimes even from his oral description, designing most of the moldings and ornament themselves and submitting the model for occasional criticism or approval. If a beautiful bit of metal work be desired, for instance a grille, a balcony, lighting fixtures or those various wrought-iron standards and lamps that are used so frequently in interiors, it may readily be obtained today. Through the help of cooperating artists, contemporary American architecture is taking on a richness and variety, and yet a coherence and sureness and harmony, that a generation ago was despaired of when architects looked back from our machine-made, commercial age to the historic periods of craftsmanship.

In this St. Louis art gallery team-play of the highest order between architect and other artists has been attained, here principally between the architect, Mr. Guy Study, and the mural painter, Mr. H. Siddons Mowbray. No pains were spared by either, and Mr. Study gave for two years his personal attention to the work.

Mr. Mowbray has had long experience in mural decoration. So early as 1899 his fine work in the Appellate Court in Madison Square, New York, brought him to the notice of Charles F. McKim, who gave him the commission for the paintings in the remarkable library of the University Club of New York. Afterward Mr. Mowbray executed the mural decorations in what is perhaps the most perfect masterpiece of Mr. McKim's in classic art, the library of Mr. J.

Pierpont Morgan. Other commissions were carried out by Mr. Mowbray, but these two alone were ample preparation for his work in St. Louis. In the University Club, especially, he had followed closely precedents of the Italian Renaissance, and had based his decorations soundly, though freely and with keen judgment of the special needs of the case, upon those wonderful frescoes of Pinturicchio's in the library of Siena Cathedral and in the Borgia apartments of the Vatican. It is thus evident that Mr. Mowbray works carefully in the traditional manner of the Italian Renaissance, tuning his compositions to the form and spirit of the conventional architecture into which he builds them. He is not of the school of moderns, like Zuloaga in painting or Brangwyn in mural painting. He seeks none of those effects of realism—flexibility, broad patchworks of color, bold design, the fleeting phenomena of light or of local changes in atmosphere—which are the aim of the moderns. Mr. Mowbray is one of an older group of men—the academic school as they are called by the younger "moderns"—and is one of the sanest and ablest in it.



PLAN.

ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS.
Guy Study, Architect.

With such a stimulating collaborator, Mr. Study planned the gallery for Mr. Breckinridge Long, a young lawyer of St. Louis, who is Assistant Secretary of State under the present administration. The building itself is small, simply one large rectangular room, in size thirty by seventy feet, lighted with a flat skylight and connected to an older house by a loggia. In making up his design the architect had the good fortune to be able to build in old art fragments and objects, such as the carved wooden doors, the stone fireplace, the tabernacle by Rosselino, and most of the furnishings. In addition he was able to use the works of some contemporary men—Paul Manship's loggia fountain, Peter Rossak's marble doorway leading into the gallery and, lastly, the frescoes by Mr. Mowbray.

Mr. Study conceived the design of the ceiling as a whole, scheming it as a rich band or frame of color around the walls and enclosing the skylight, to encase the various objects of art below in the room. This frame consists of a flat, broad, strongly colored and gilded frieze with paneled soffits, the mural decoration, in coves and lunettes, resting above a narrow cornice on the walls of the room. It is the same motive as was used by Pinturicchio, both in the Siena Library and in some of the Borgia apartments.

Among all the masterpieces of the architecture of beautiful rooms none has quite reached the height—or the depth—of the Borgia rooms. There is something extraordinarily rich in the deep, vibrant, almost resonant, tones of its gilt and color, of its exquisite russets and violet purples and blues, of olive greens, and deep hues of human flesh in gloom; something of mystery and of the eternal



ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS.
Guy Study, Architect.

that carries it above the mere geometry of architecture. In color it is almost medieval; its pure, deep harmonies equal the exquisite twelfth and thirteenth century enamels, such as the little cloisonné chests of the Morgan collection at the Metropolitan Museum.

One must admire the skill and sureness of a painter who in these days would attempt to cast new wine into old bottles by carrying Pinturicchio in his most exalted mood into modern America. Doubtless the artist himself would disclaim the purpose; would deny that the comparison was quite fair. However, the work does follow well-known precedent, with perhaps enough diversity to allow Mr. Mowbray to be judged on his own merits, which are exceedingly high ones.

Of the lunettes there are twenty-four: four of them containing large figures symbolic of the great art periods bearing upon the Renaissance, Greece, Rome, Byzantium and Asia; the rest of the figures personify painting, goldsmithing, pottery, architecture, poetry, music, sculpture and illumination, and alternating with them are portraits of the great masters of the Italian Renaissance. Not only is the success of the painter in this frieze unusual, but it is evident that the architect in his proportioning of it has contrived this great motive of enframing band strongly and vigorously, yet has kept it at the same time graceful, light and springy, in perfect scale and in perfect style. The room thus has a fine appearance of spaciousness and airiness, without any of that top-heaviness which results from the slightest mistake in the design of this most difficult motive of ceiling with centre skylight and cove along the walls. Though one of the most trying schemes to handle, there is no doubt of its wonderful effectiveness when well done. Incidentally, Mr. Mowbray not only did the drawing and painting, but took a hand in the design and execution of the moldings and relief decoration in the lunettes as well. Moldings are among the most difficult details of archi-



ENTRANCE FROM GALLERY TO LOGGIA—ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.



LOGGIA BETWEEN RESIDENCE AND ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS.
Guy Study, Architect.



LOGGIA BETWEEN RESIDENCE AND ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS.
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"BYZANTINE"—SKETCH BY H. SIDDONS MOWBRAY FOR LUNETTE IN ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.



"THE FAR EAST"—SKETCH BY H. SIDDONS MOWBRAY FOR LUNETTE IN ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.



Raphael.



Rossellino.

PORTRAIT SKETCHES BY H. SIDDONS MOWBRAY FOR LUNETTES IN ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.



"SCULPTURE"—SKETCH BY H. SIDDONS MOWBRAY FOR LUNETTE IN ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.



"ARCHITECTURE"—SKETCH BY H. SIDDONS MOWBRAY FOR LUNETTE IN ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS. GUY STUDY, ARCHITECT.



DETAIL OF CEILING DECORATION—ART GALLERY OF BRECKINRIDGE LONG, ESQ., ST. LOUIS.
Guy Study, Architect.

tecture, are in fact sculpture, and to find a contemporary painter who is skillful in them is unusual, though Mr. Mowbray models as well as paints in decoration.

All the ancient fixtures have been most carefully chosen, and where new ones were necessary the designers were at immense pains to have them equal their surroundings. Thus, the tapestries were designed in this country and work on them was begun in Italy two years before they were to be installed.

As in the case of most art galleries, the lighting of this room became a serious problem. It was the intention to obtain an illumination at night that could approximate the light of the day. In order to do this the entire space between the upper and the lower skylight is flooded with artificial light. This light is reflected down into the gallery by means of white enamel reflectors made in the form of movable louvres placed under the upper skylight, the louvres being operated by a control in the gallery wainscot and serving to shut out the sunlight during daytime.

The excellence that has been noted in the decorated ceiling of the gallery is to be seen throughout the building. There is the sure detailing of the severe pilastered walls and balustraded crowning and of the Palladian entrance. Inside, this entrance or loggia is effective, though it suffers somewhat from the rather heavy banding on the walls and from the awkward stopping of the cornice at the ceiling over the arch of the entrance doorway.

One cannot view a work such as the Long art gallery without growing astonished that in our day men can so remarkably recreate the past, are able to work so consistently and so skillfully in a revived tradition and yet invest their product with so much life and vigor.



ST. PAUL'S, LONDON, BY WREN. THE MOST IMPORTANT MONUMENT OF THE RENAISSANCE IN ENGLAND.

RENAISSANCE ARCHITECTVRE AND ITS CRITICS

By A.D.F. HAMLIN

PART I - *The Critics and Their Writings*

THE literature of Renaissance architecture is abundant but singularly fragmentary. There is a host of books on particular phases of the subject and a still greater array of monographs of notable monuments or groups of buildings. There are costly works in several volumes on English Renaissance architecture,* on French Renaissance architecture,† and on the Renaissance in Tuscany.‡ There are notable single volumes on the architecture of the Renaissance in particular countries, like Lübke's *Die Renaissance in Frankreich* and his *Geschichte der deutschen Renaissance.* Berty's *La renaissance monumentale en France,* Anderson's *Architecture of the Renaissance in Italy,* Prentice's *Renaissance Architecture and Ornament in Spain,* Haupt on the Renaissance in Portugal, and so on. There are collections of plates with a modest accompaniment of text, like Fritsch's *Denkmaeler der deutschen Renaissance* and Schütz's *Die Renaissance in Italien.* There are books on church architecture in Central Italy, on palace architecture in Genoa, on the buildings of modern Rome, on the early Renaissance in France. There is, of course, a certain amount of space devoted to the Renaissance styles in all general histories of architecture. For not only is the total volume of the literature of the Renaissance, considerable as it is, much smaller than that of the Gothic styles and monuments, but there is a singular lack of treatises on Renaissance architecture as a whole. So far as I know there exists not a single history of Renaissance architecture in general, whether in one or many volumes, in either German or Italian, and but one such book in French—a small volume by Léon Palustre in the *Bibliothèque de l'enseignement des beaux-arts,* principally devoted to the Italian and French phases, with only the briefest summarizing of the German and Spanish Renaissance. The historical series in the great *Handbuch der Architektur,* entitled collectively *Baustile,* includes volumes on the Renaissance architecture, respectively, of Italy and of Germany and the Low Countries, designed to be followed, doubtless, by similar volumes on the other European phases of the Renaissance; but these supplementary volumes do not yet exist. It seems, therefore, to be a fact that up to the present time the only serious effort to present in a single treatise a comprehensive survey of post-medieval architecture in any language—certainly in English—has been the indispensable Fergusson's *History of Modern Architecture,* published originally in one volume in 1873 and republished in two volumes, revised and amplified by the late R. Phené Spiers, in 1893. It is true that the third volume of Professor F. M. Simpson's excellent *History of Architectural Development* (Longmans, London) is devoted to the architecture of the Renaissance; but it covers only that of Italy, France and England. Germany, Spain and America are left wholly out of the account.

A part of the fourth volume of the Sturgis-Frothingham *History of Architecture* (Doubleday-Page, New York) also is devoted to the architecture of modern times; but the treatment of the Renaissance styles, excellent as far as it goes, is too summary to be classed with independent histories of the style. Pro-

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*R. Blomfield: *A History of Renaissance Architecture in England* (2 vols.; London, 1900).
Gotch and Brown: *Architecture of the Renaissance in England* (2 vols.; London, 1895).

†R. Blomfield: *History of French Architecture,* 1494-1661 (2 vols.; London, 1911).
W. H. Ward: *French Renaissance Architecture,* 1495-1830 (2 vols.; London, 1911).
L. Palustre: *La Renaissance en France* (3 vols.; Paris, 1879-85).
Cl. Sauvageot: *Choix de palais, châteaux, hôtels et maisons de France* (4 vols.; Paris, 1867).

‡Geymüller and Stegmann: *Die Architektur der Renaissance in Toscana* (11 vols.; Florence, 1885-1908).



ST. PETER'S, ROME, FROM THE WEST. THE CENTRAL CHURCH OF THE ROMAN CATHOLIC WORLD.

fessor Moore's interesting and provocative volume on *The Character of Renaissance Architecture* to some extent meets the definition of a general work on Renaissance architecture; but it is not a *history,* nor does it attempt to discuss all the phases of the Renaissance in different countries. It is an interesting contribution to the criticism of the styles of which it treats, and is of value because its unsympathetic and even hostile attitude inevitably provokes the reader to critical inquiry and mental discussion. It is a work to be counted with in all studies of the Renaissance point of view, the Renaissance method and the Renaissance achievement.

Mr. Russell Sturgis devotes nearly one-third of his *European Architecture* (Macmillan, New York, 1896) to the Renaissance, but the account, though sympathetic in part, was evidently written with far less interest and enthusiasm than the chapters on the medieval styles which precede. The same author in his *Dictionary of Architecture* devotes to the title "Renaissance Architecture" only a scant column of text, although forty columns go to the title "Romanesque Architecture" in the same volume. That is, he did not view the Renaissance developments as constituting a sufficiently unified movement to warrant an extensive discussion in a general article; he treats its various phases as chapters in the national architectures of Italy, France, Spain, Germany and England. There is, however, in the same volume, an excellent article under the title "Neo-Classic Architecture," by the late W. P. P. Longfellow, to which later reference will be made.

Compared with the small relative amount of writing in English on the architecture of the Renaissance, the literature of the subject in French, German and Italian—especially in French and German—is voluminous. One thinks

at once of such works as Léon Palustre's great work *La Renaissance en France;* of Sauvageot's *Choix de palais, châteaux, hôtels et maisons de la France;* Berty's *La Renaissance monumentale en France;* Daly's *Motifs historiques;* Rouyer and Darcel's *L'Art architectural en France;* de Laborde's *La Renaissance des arts à la cour de France;* Müntz's *La Renaissance en Italie et en France à l'époque de Charles VIII,* and other studies of the Renaissance both in France and Italy. Every architect knows the Frenchman Letarouilly's indispensable *Edifices de Rome moderne.* The Germans have produced a number of remarkable studies of the Italian Renaissance like Schütz's *Die Renaissance in Italien* and the superb *magnum opus* of Geymüller and Stegmann, *Die Architektur der Renaissance in Toscana* (published also in a French edition). Lübke wrote an excellent history of the French Renaissance in two volumes—*Die Renaissance in Frankreich*—and a volume on the German—*Geschichte der deutschen Renaissance.* In the Darmstadt-Stuttgart "Handbuch der Architektur" there are volumes by Durm, *Die Baukunst der Renaissance in Italien* and by von Bezold, *Die Baukunst der Renaissance in Deutschland, Holland, Belgien und Dänemark.* Haupt has written a volume on the Renaissance in Portugal; Galland and Everbeck volumes on that of Belgium and Holland; Fritsch and Ortwein on the German Renaissance, Gurlitt on the Baroque in Italy; Laspeyres and Strack each on Central Italian churches.

Within the last twenty or twenty-five years, it is true, the English indifference to the Renaissance has begun to give way to a broader appreciation of and greater interest in its architecture, both that of England and of the continent. Such works as Gotch and Brown's *Architecture of the Renaissance in England;* Belcher and Macartney's *Later Renaissance Architecture in England;* Blomfield's *A History of Renaissance Architecture in England* and an excellent abridgement of the same; Anderson's *Architecture of the Renaissance in Italy;* Prentice's *Renaissance Architecture and Ornament in Spain;* Richardson's *Monuments of Classical Architecture in Great Britain and Ireland;* Loftie's *Inigo Jones and Wren;* Ward's excellent two-volume history of *The Renaissance in France,* are evidences of this new interest, and creditable to English architectural scholarship.

Yet despite these lists and scores of other volumes in English, French, German and Italian, which lack of space forbids mentioning, the entire literature of the Renaissance is not to be compared in amount with that of the medieval styles. And in none of these languages—certainly not in English—is there a book to dispute the unique position of Fergusson's "Modern Architecture" as the solitary comprehensive account and discussion of Renaissance architecture as a whole.

II.

Let us now look into the reasons for this singular neglect of a great opportunity for the scholarly discussion of a great and worthy subject.

In a previous article* I tried to point out some of the reasons for the great popularity of the whole subject of Gothic architecture. The conspicuous splendor of its masterpieces, the historic associations that cluster about them, their appeal to the religious as well as the esthetic emotions, their mystery and their variety, are all concerned in the universal interest they arouse. This interest was first awakened in the second quarter of the last century by an enthusiastic propaganda which arose as a reaction against the utter inanity of the architecture of that time in England. The movement was carried forward on the wave of the combined romantic and religious awakening, which expressed itself otherwise in the eloquent phrases and preachments of Ruskin, in the Tractarian movement, in the Pre-Raphaelite Brotherhood, and in the whole progress of the Victorian Gothic development. Its leaders were scholars, poets, preachers; it worshiped the Middle Ages; its foremost advocates were less architects

*"Gothic Architecture and Its Critics: The Lure of Gothic" in the *Architectural Record* for April, 1916: vol. xxxix, 4.



VENDRAMINI PALACE, VENICE. USE OF AN ALPHABET OF ELEMENT FORMS ALREADY PERFECTED.

than ecclesiologists, antiquarians, archeologists and enthusiasts. It was primarily an intellectual and literary movement; secondarily a nationalistic movement, based on the surprising rediscovery of the long-neglected splendors of English medieval religious architecture. It was artistic in a measure, but not primarily so. The fervid enthusiasm of writers like Pugin and Ruskin, the patient labors of men like Rickman and Britton, the scholarship and energy of practising architects like Scott and Street—these were what focused the attention of the English people on their Gothic architecture, with the secondary result of depreciating everything that England had produced since 1500. Ruskin, with his passionate medievalism, felt toward the Renaissance an intense antipathy and he never understood its real significance; and while certain of its painters received his unstinted praise—Tintoretto above all the rest—the Renaissance as a whole embodied, for him, all that was irreligious, immoral and selfish, and its architecture was to him anathema. And Ruskin's influence on English thought and English letters was very great.

Now the qualities which especially commend Gothic architecture to popular favor are precisely those which are wanting in Renaissance architecture. The appeal of the Renaissance monuments is primarily esthetic, not intellectual; assertive rather than suggestive; addressed to the eye rather than to the imagination. In general, each monument is a finished product; a conception expressed finally, without mystery, with no suggestion of hidden symbolism. While the greatest of its monuments is a church, the central church of the Roman Catholic world, its characteristic expression was formed in the field of secular rather than of religious architecture, in palaces and civic monuments, villas and town-halls rather than in cathedrals. And since the instincts of wonder and worship are more widely diffused than that of esthetic

appreciation, it is easy for many to rhapsodize over the mystery of a venerable Gothic church; but it is given to few adequately to apprehend and enjoy the exquisite refinement of Peruzzi's Massimi Palace or even the stupendous beauty of Michelangelo's dome of St. Peter.

There is another broad difference between the two sorts of architecture, seldom realized by the casual student, reader or tourist. The monuments of the Renaissance are chiefly individual works, each the child of a single brain. Even when, as in the case of the Louvre, of St. Peter's or of the Vatican at Rome, or of the Capitol at Washington, the monument is the product of successive periods, each part displays the work of an individual rather than of an age. The great Gothic churches, on the other hand, are not individual works, rarely the products of single periods. They are collective works, collaborative designs, whose authors are often quite unknown; and they are most interesting when they have come into being by successive stages, through long periods of time, each part the expression of the taste, resources, ideals of a different age. They are complex in their human interest; they have wonderful histories which appeal to the intellect quite apart from their intrinsic beauty of form and detail. And since they are all older, most of them much older, than any of the monuments of Renaissance, they are dowered with the fascination of antiquity as no Renaissance building, in the nature of things, can be.

There is still another broad difference between the architecture of the Renaissance and that of the Middle Ages. In all classic and neo-classic design the architect expresses his conceptions by means of an alphabet of element-forms already perfected, wrought to a species of finality by centuries of experimentation. The types of these element-forms are fixed; the designer reveals his artistic quality in the way he composes his design with these elements, in the refinement of his proportions, in the infinitely varied subtleties of his profiles, the variations of his details, the harmony and rhythm of his *ensemble* and of its decoration. In Renaissance architecture these fixed or conventional type-forms are adapted to an infinite variety of kinds and types of buildings, utterly diverse in plan, mass, proportions and purpose. In Gothic architecture, on the other hand, it is the general type of the building that is fixed—that of the several-aisled cruciform church with high vault and towers —and the form-elements that are endlessly varied. To the ordinary spectator this endless variety of detail makes a powerful appeal; while the refinements of proportion, the subtleties of such minute variations as alone are practicable (though artistically important) in the details of a Renaissance design, and the beauty of its space- and mass-composition, are qualities which require for their true evaluation a more sensitive artistic appreciation than do the more obvious qualities of Gothic design.

This is an inadequate presentation of the underlying difference between Gothic and Renaissance design, and an inadequate explanation of the reasons for the greater popularity of the study of Gothic architecture, and of that architecture itself as compared with that of the Renaissance; but these may suffice to suggest others, and may help to an understanding of the reasons why the two kinds of architecture cannot be properly judged by the same criteria. The broad-minded critic makes the necessary distinctions, recognizing that in the world of architectural excellence there is room for both kinds. Some critics fail at this point: apparently none of those of the nineteenth century attained to such breadth of appreciation. They could not admire or even admit two kinds of architecture. Like some of the more enthusiastic Gothicists of today, they proceeded upon the assumption that if the one kind was right, the other must be wrong; if one was good architecture, the other must be bad architecture; if the Gothic principles and system were correct and the results admirable, the Renaissance principles and system must be incorrect and vicious, and their results unworthy of praise. They divided all art, as the moralist divides all conduct, into the two cate-

gories of right and wrong. There was one right way, and all the rest were wrong. Fergusson calls the two categories respectively "the True Styles" and "the Copying Styles." Ruskin loses no chance for a fling at the Renaissance as well as at Roman architecture; good and praiseworthy architecture was only practised during the 1,000 years from 500 to 1500, and mainly during the second half of that period. It was Christian art, the product of the age of Faith, hence it was noble art; the Renaissance killed faith, hence its art was pagan and base. Professor Moore applies the critical standards and processes of the French Gothic builders to the Renaissance monuments and finds these wanting, precisely as the critics of the seventeenth century had applied the criteria of their neo-classic art to the medieval monuments and found them wanting. This conviction of the essential superiority of the Gothic architecture was greatly strengthened by Viollet-le-Duc's revelation of its marvelous structural logic, which supplied for this prevalent enthusiasm a rational and philosophical foundation that the more purely sentimental admiration of the earlier advocates had lacked.

Moreover the English temperament, in spite of the classical enthusiasms of the great schools and universities, has in matters of art always been inclined toward the romantic, the sentimental and the picturesque. In architecture the Englishman loves turrets, gables, irregular plans, much-broken surfaces, multitudinous small parts, picturesque and accidental features—the qualities which characterize his Gothic architecture. In spite of Wren, Chambers and Elmes, St. Paul's cathedral and Somerset House and St. George's Hall are noble exotics; the Houses of Parliament, the Imperial Institute and the Westminster Cathedral are far more characteristic modern expressions of this English national taste. It has never been really sympathetic towards the neo-classic styles or even toward the freer early developments of the Renaissance on the Continent. And until recent years we have taken our critical estimates very largely from England.

III.

In a previous paper of this series I called attention to the remarkable fact that a large part of the literature of the Gothic styles was from the pens of amateurs and laymen rather than of architects; a fact which may in large measure be accounted for by the considerations I have just brought forward. Gothic architecture appeals to the clergyman, the ecclesiologist, the historian, the archeologist, the lover of the picturesque, by reason of qualities and characteristics quite independent of its purely technical and esthetic element. Ruskin, E. A. Freeman, Bond, the Dean of Peterboro, Mrs. Van Rensselaer, Professor Frothingham, Professor Moore, I. F. Bumpus, Professor A. M. Brooks, are among the names that occur of writers on Gothic architecture who are not architects. Some of their number have written with competence and with great learning on various phases of the subject, and much of their work has equaled, and in some cases surpassed in merit, the writings of architects like Fergusson and Sturgis, excellent as are the contributions of these latter. The conclusion from this is that the great attraction of the subject for the layman and for the multitude depends upon other than primarily architectural factors. Its associations, its antiquity, its religious significance, its symbolisms, and of late years its structural logic, are quite as important elements in this popularity as its intrinsic architectural interest. But only the mistaken narrowness of some of its extreme partisans can account for their attitude of hostility to the claims of Renaissance architecture; their refusal to recognize its fundamental merits, its reasonableness, its appropriateness to its purposes, its beauty of form and detail. They refer to it invariably in disparaging terms; when its beauties compel acknowledgment, it is as if with a deprecatory shrug of the shoulders. It may be beautiful, but it is wrong in principle; the esthetic aim of the designer may have been attained, but he should have had a different aim; it is a copying art; it is an art of mere mechanical repetition; it is destitute of spiritual content;



THE LAW COURTS, LONDON. THE ENGLISHMAN LOVES TURRETS, GABLES, IRREGULAR PLANS, BROKEN SURFACES.

it is the product of a decadent and godless age; and so on.

IV.

A few illustrations of this spirit of wholesale depreciation of Renaissance architecture will bring this introductory paper to a close, and prepare the way for a more detailed study, in one or more papers to follow, of the dealings of the critics with this architecture.

Fergusson, in the Introduction to his "History of Modern Architecture," observes (p. 2) that "whatever the other merits of modern buildings may be, the element of truthfulness is altogether wanting." What he means by lack of truthfulness is suggested in the next sentence: "St. Peter's or St. Paul's are (*sic*) not Roman buildings, though affecting a classical style of ornamentation." On p. 3 he remarks: "There is not perhaps a single building of any architectural pretension erected in Europe since the Reformation * * * which is not more or less a copy, either in form or detail, from some building either of a different clime or different age from those in which it was erected." On p. 9, after explaining the decay of ecclesiastical architecture after the Reformation and observing that palace architecture involves the inclusion of domestic and service quarters "which no art can hide and no taste can dignify," he asserts that "the architects of the Renaissance tried to divert attention from these by placarding their buildings with the porticoes and details of the Templar Architecture of the Romans," and degraded the borrowed features, which were beautiful in themselves, without elevating the building whose deficiencies they thought they might thus be able to conceal. On page 24, speaking of modern, that is contemporary, architecture, he voices a criticism which both he and others have repeatedly applied to the entire system of the Middle and High Renaissance and of all neo-classic architecture, where he speaks of "the remarkably small amount of thought of any kind that a modern building displays. * * * In almost all cases the pillars, the cornices, the windows, the details are not only repeated over and over

again in every part, but are probably all borrowed from some other building of some other age, and to save trouble the one-half of the building is only a reversed tracing of the other. In one glance you see it all. * * * In a work of true art, such as a medieval cathedral, the case is different."

In all the buildings erected since Palladio's day "there is a falsehood and a striving at false effect running through the whole that always leaves an unpleasant impression on the mind of the spectator." "Since the revival of learning all architects have been composing in a dead language." Ruskin in his "Stones of Venice" (vol. II; viii. 25), speaking of the alterations in the Doge's Palace begun under the Doge Foscari in 1422, says: "That hammerstroke" (i.e. the first hammer stroke lifted against the old Byzantine wing) "was the first act of the period properly called the Renaissance. It was the knell of the architecture of Venice—and of Venice herself." This attitude toward the entire Renaissance is further illustrated in his Edinburgh lectures (Addenda to IV, on "Preraphaelitism"), in which he declares that Raphael, in the Camera della Signatura, "wrote upon its wall the *Mene, Tekel, Upharsin* of the Arts of Christianity." On another page, after calling Renaissance architecture "Modern Greek architecture," he employs this language: "And it is with reference to this principle in modern Renaissance architecture" (the principle that "ornament must be thoughtful") "that I speak of this architecture with a bitterness which appears to many readers extreme; while in reality, so far from exaggerating, I have not grasp enough of thought to embrace the evils which have resulted among all the orders of European society from the introduction of the Renaissance schools of building, in turning away the eyes of the beholder from natural beauty, and reducing the workman to the level of the machine." He asserts that all the Gothic artists and workers were happy, and that since their day all artists and workers have been without intellectual power and hence unhappy in their work. In much of this criticism he confounds under one condemnation the inartistic philistinism of his own day and the entire Renaissance which preceded it; which can hardly be called discriminating criticism. Professor Moore's interesting, and in many ways stimulating, book on "The Character of Renaissance Architecture" is pervaded throughout by a spirit of hostile criticism, a total lack of sympathetic appreciation. Mr. Ralph Adams Cram, a master of literary expression, and like Ruskin a most fervent medievalist, has repeatedly given utterance to his dislike of Renaissance architecture and to his belief in the essential superiority of the culture of the Middle Ages to the cultureless civilization of modern times, including the Renaissance. This feeling is expressed forcibly in "The Heart of Europe" and in his recently published lectures before the Chicago Art Institute on the Scammon Foundation.*

Over against this notable mass of hostile criticism we may set some of the later English and American writers, who have discussed Renaissance architecture with sympathy, discriminating appreciation and even enthusiastic admiration. Some of these I have mentioned: Professor F. M. Simpson and Professor A. L. Frothingham in their respective histories of architecture, Mr. W. H. Ward, Mr. Reginald Blomfield, among others. Mr. Anderson in his "Architecture of the Renaissance in Italy" was the first Englishman to defend the Italian Renaissance architects against Mr. Fergusson's sweeping charge of copyism. The French and German writers on the Renaissance ignore the medievalistic attitude entirely —Geymüller, Stegmann, Eugène Müntz, Palustre and a host of others. A noticeable characteristic of these European writers is the entire absence of hostile animus toward other styles than the one whose merits they are especially occupied in setting forth, or whose historical development they are tracing. The critical attitude, that recognizes excellence only in one kind of architecture, in one system or method of design, and proclaims all others as fundamentally wrong, finds no sympathy among them. This is

Six Lectures on Architecture (Chicago, The University Press).



ST. GEORGE'S HALL, LIVERPOOL. THE MOST IMPORTANT EXPRESSION OF THE GRECO-ROMAN REVIVAL IN ENGLAND.



THE HOUSES OF PARLIAMENT, LONDON. THE MOST IMPOSING MONUMENT OF THE GOTHIC REVIVAL IN ENGLAND.

equally true of the English writers whom I have named—of Simpson, Ward, Blomfield, Anderson; of our own Frothingham, and some others. The breadth of view which recognizes merit of different kinds in widely diverse styles of architecture, is found in nearly all who have occupied themselves seriously with Renaissance architecture. Fergusson and Moore are conspicuous exceptions; of the two, Fergusson is the more tolerant and sympathetic. Mr. Russell Sturgis, in his "European Architecture," is not wholly sympathetic to the Renaissance development, but he is less fundamentally hostile than either of those just mentioned. The late W. P. P. Longfellow, in his excellent article on Neo-classic Architecture in the Sturgis "Dictionary," displays a spirit of judicial discrimination and perfect fair-mindedness, appraising with perspicacious balance of judgment alike the merits and defects of the whole movement. It is to be regretted that the gifted author of "Arch and Column," and of the article just mentioned, should have left to the world so slender an output of literary performance. I must not omit mention here of the veteran and venerable Sir Thomas G. Jackson, who, though an enthusiastic medievalist, writing almost wholly on various phases of the medieval styles, has in numerous *obiter dicta* in his volumes manifested a like breadth of critical appreciation, which could penetrate through obvious defects to the underlying merit of Italian design both in the medieval and the classic and neo-classic manners.

The narrowness of view which resulted from the English medievalistic and neo-Gothic revival of the nineteenth century is surely passing away. It was born of a prevalent misconception of the meaning and nature of architecture itself, which focused attention at first on the details and dressings of the art, conceiving that if one kind and system of forms was right and logical, all others must be fundamentally wrong. Those who held this view directed their attack upon Renaissance architecture along two lines: one, against its alleged lack of structural logic; the other, against its details, as being derived from a vain effort to revive a dead style by copying—which is precisely the error that Fergusson, more clear-sighted than most of his contemporaries, charged against the majority of the English protagonists of the Gothic Revival!

In another paper I shall discuss in some detail the charges most frequently made against the Renaissance styles, and endeavor to sift the grains of truth in these from the many errors that accompany them, and to present certain considerations in defense which these charges appear to overlook.



Photograph by Charles W. Stoughton in 1886.

VISTA THROUGH THE HALL AND COUNCIL CHAMBER FROM THE FRONT DOOR—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.

The Roger Morris House
(Jumel Mansion), New York City

By
Rawson Woodman Haddon
With Measured Drawings by Joseph Palle

PART II.

WHEN we consider the long, varied existence of the Morris house, and remember that it has been in turn a "mansion" in the strictest eighteenth century sense of the word, a tavern or road house, and later, as Washington noted, a country house in more or less rundown condition "in the possession of a common farmer," it seems remarkable that so little new work appears in the building, and that the house should be at the present day, with but a few exceptions, so consistently Colonial.

The interior is practically in its original condition so far as the architectural design is concerned, and important changes are to be found only in certain exterior details.

Few houses, indeed, even among those that have been considered worthy of preservation as architectural monuments regardless of historical associations, have been so little changed in course of time as the Morris house has. And from the very fact of its being so largely Colonial and with so little that dates from post-Revolutionary times, it would seem, out of strict historical regard for the varying periods of early American architecture, that whatever parts of the Morris house date from a later time than the original structure should be pointed out.

It is a fact, however, that claims are made that the house as it stands today is entirely Colonial. The historian of the house says: "For one hundred and thirty years the house, above the basement, remained unchanged except for a partition wall shutting off the stairway from the lower hall, and designed to keep the living-rooms warmer in the wintertime during the open-fire period, and this was removed some years ago. Two English hob-grates were set in the fireplaces of the two parlors, probably about 1827, for burning coal, and at some not remote period a door was opened between the southwest and the northwest chambers."

And after mentioning some alterations to the kitchen, which—excepting that the original fireplace has recently been discovered and opened up—are of slight importance, Mr. Shelton makes this statement in his book: "That some alterations in the interior should creep into so old a house, occupied by so many owners and by so many tenants, would seem inevitable, but, barring the aforesaid alterations, the house seems to have come down to the end of the Jumel period, 1887, and even to 1894, almost exactly as it was originally built."

It is unfortunate that in writing this, without knowledge that would enable him to distinguish between the various "periods" of early American architecture, the author fell into the error of stating that "the severe plainness of the Colonial interior, where ornament was usually lavished on mantelpiece and staircase, would suggest that rapidity of construction may have been the prime object," and that "only on the beautiful doorways was time lavishly spent."

As a matter of fact, out of desire for historical accuracy in the study of the house, it should be mentioned that the doorways referred to, detail drawings of which accompany this article, are the most important of the *later* additions and are not a part of the "Colonial" structure at all.

We have a clue to the date of their erection in the fact that, when the house

was purchased in 1799 by Leonard Parkinson, it was in a more or less ruinous condition, and that while repairs must have been made at that time, and between then and the date at which the property came into the possession of Stephen Jumel, its condition was such that extensive alterations and repairs were still necessary at the time of the Jumel purchase.

It is also possible to form an opinion of the date of these doorways by observing their design and comparing it with similar designs found at other buildings of which the date of erection is accurately known. In doing this we find that these additions were made, most likely, by Jumel in or about the year 1810.

Elaboration and profusion of ornament are by no means a characteristic of Colonial work. Neither is the design of these particular door frames to be compared in character with the Adam-like work which was popular after the Revolution and which reached its highest development in the McIntire work of the period (roughly) between 1780 and 1800.

The details of these doors show the characteristics of a distinctly separate and later development. As the style was not used to any large extent before 1800, and reached very nearly its highest period about 1812, it seems perfectly safe to assign the date of the doorways on the first floor (the main door and the door at the east side of the house) and on the second floor (the door leading to the balcony) to the Jumel period, and to state as a positive fact that they are not Colonial work, but were added at the time of the repairs in 1810.

The interior trim around the windows at the sides of the second floor door seem to be the original work, as the interior door trim may also be; but the entire door frame, sidelights, and transom down stairs are early nineteenth century work. The doors, transom and frame leading from the hall to the "council chamber" are also nineteenth century work, but apparently of a slightly later period than the exterior doors. But the door on the west side of the house, at the connecting passage between the "council chamber" and hall, is unquestionably the original Colonial product. The transom design at this door is interesting and unusual, as is the paneling of the door itself.

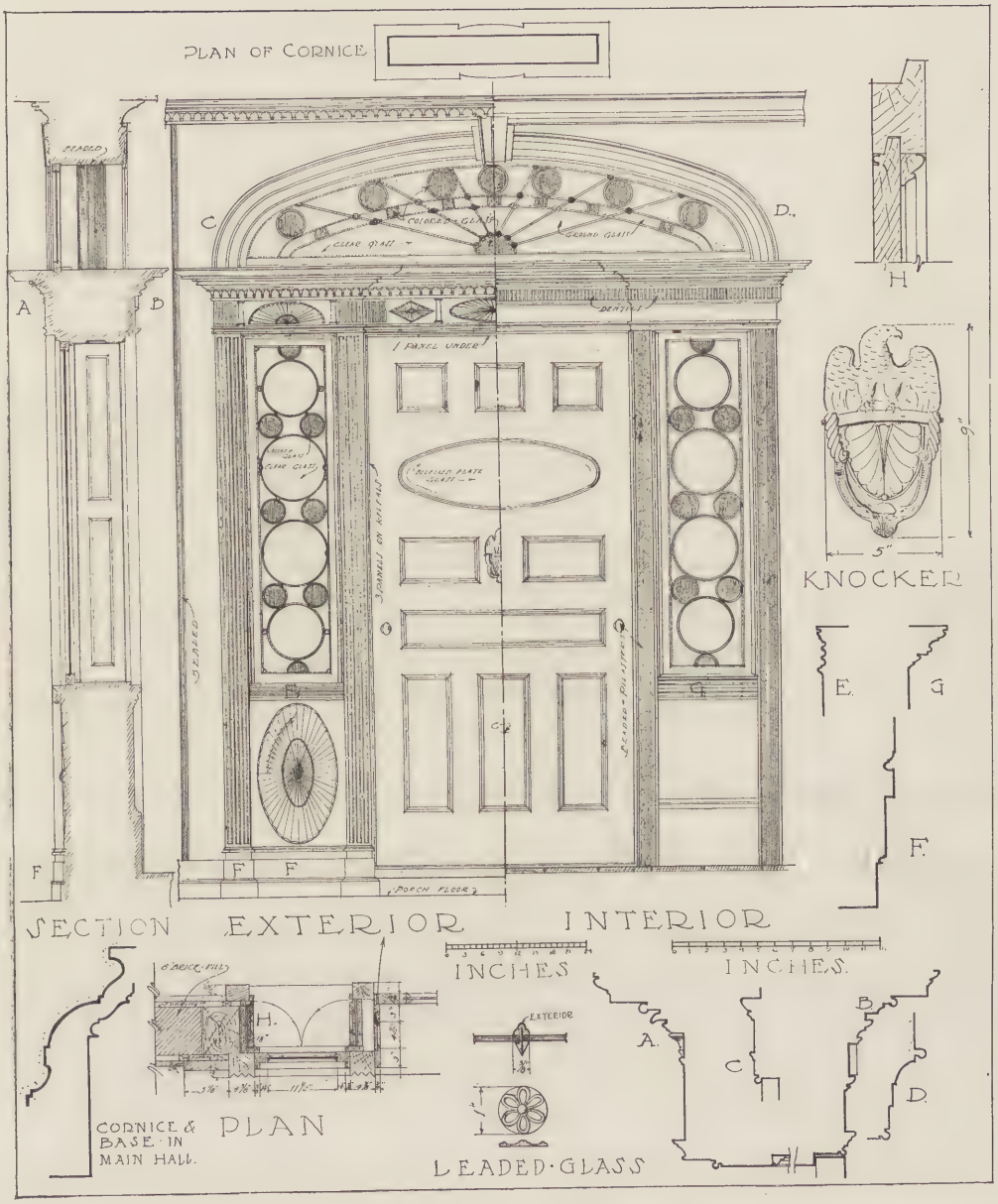
It is quite certain that the mantels throughout the house, with the exception of the one in the "oblong octagon" room, or, as it is now called, the "council chamber," are original. Their character is undoubtedly Colonial and they are good examples of the type.

The stone mantel at present in the room is, however, very evidently a later addition, and the phrase "marble chimney pieces" (*sic*) in the advertisement of 1791 must have referred to one since moved out of place. The present mantel, at any rate, is an interesting example of design of a much later period, and is in no way different from others of the kind with the possible exception of the unusual thinness of the shelf, this being, instead of an entablature designed in classic proportion, simply a piece of marble about an inch thick.

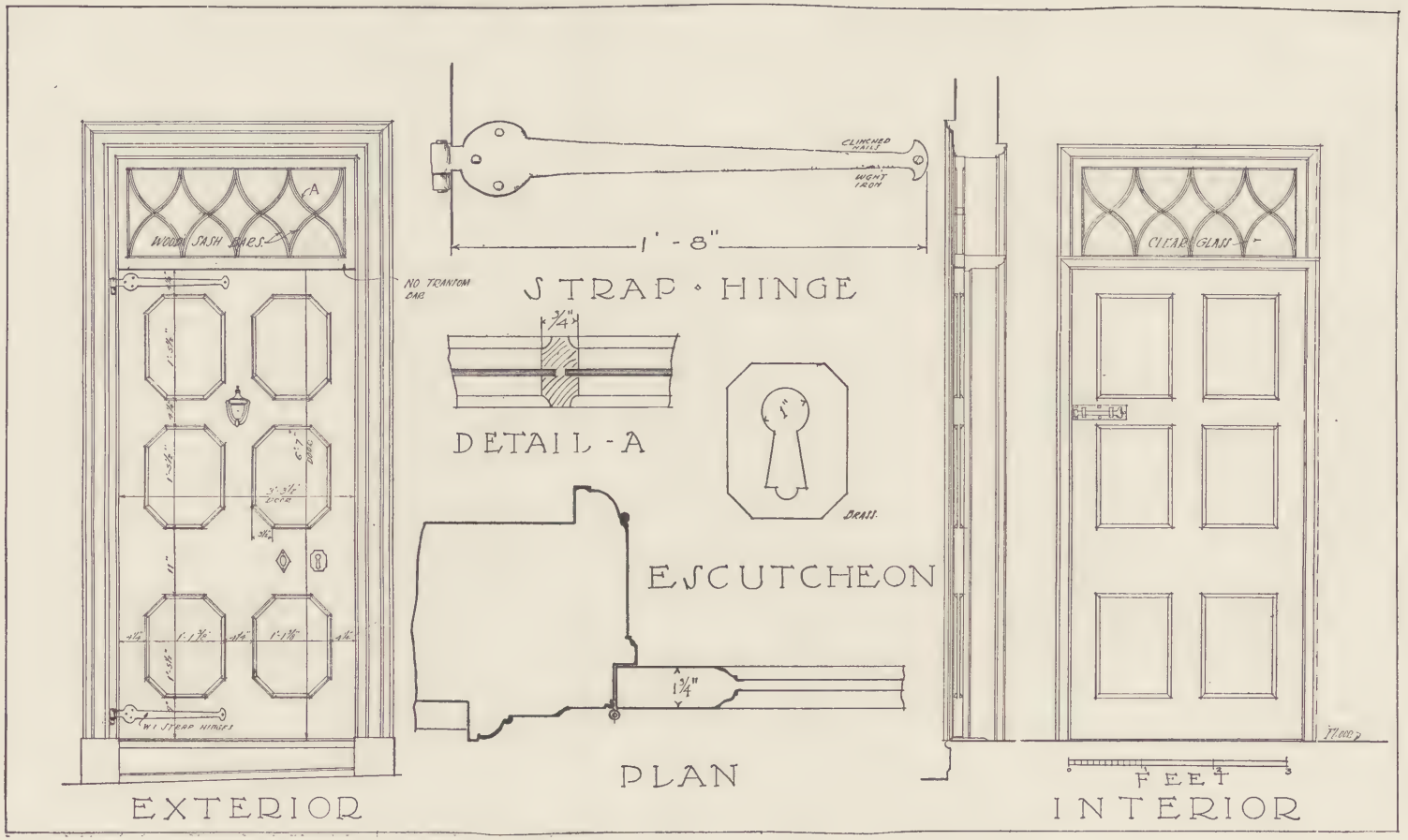
It cannot be said with any certainty that this mantel is a Jumel addition. It is hard to place a date from the evidence of design, owing to the fact that this type of mantel was popular from about 1815 to as late as 1825 or 1830. It is altogether probable that it may have been put in during one of Madame Jumel's long trips to France—during the occupancy in 1826 of a family by the name of Clinton, or during its occupancy by Moses Field in 1825, or upon the return of Madame Jumel early in the summer of 1826.

The cornices in the rooms on the lower floor seem, also, to be of late origin. Their section at any rate is found in houses built as late as 1850 and in books of that period.

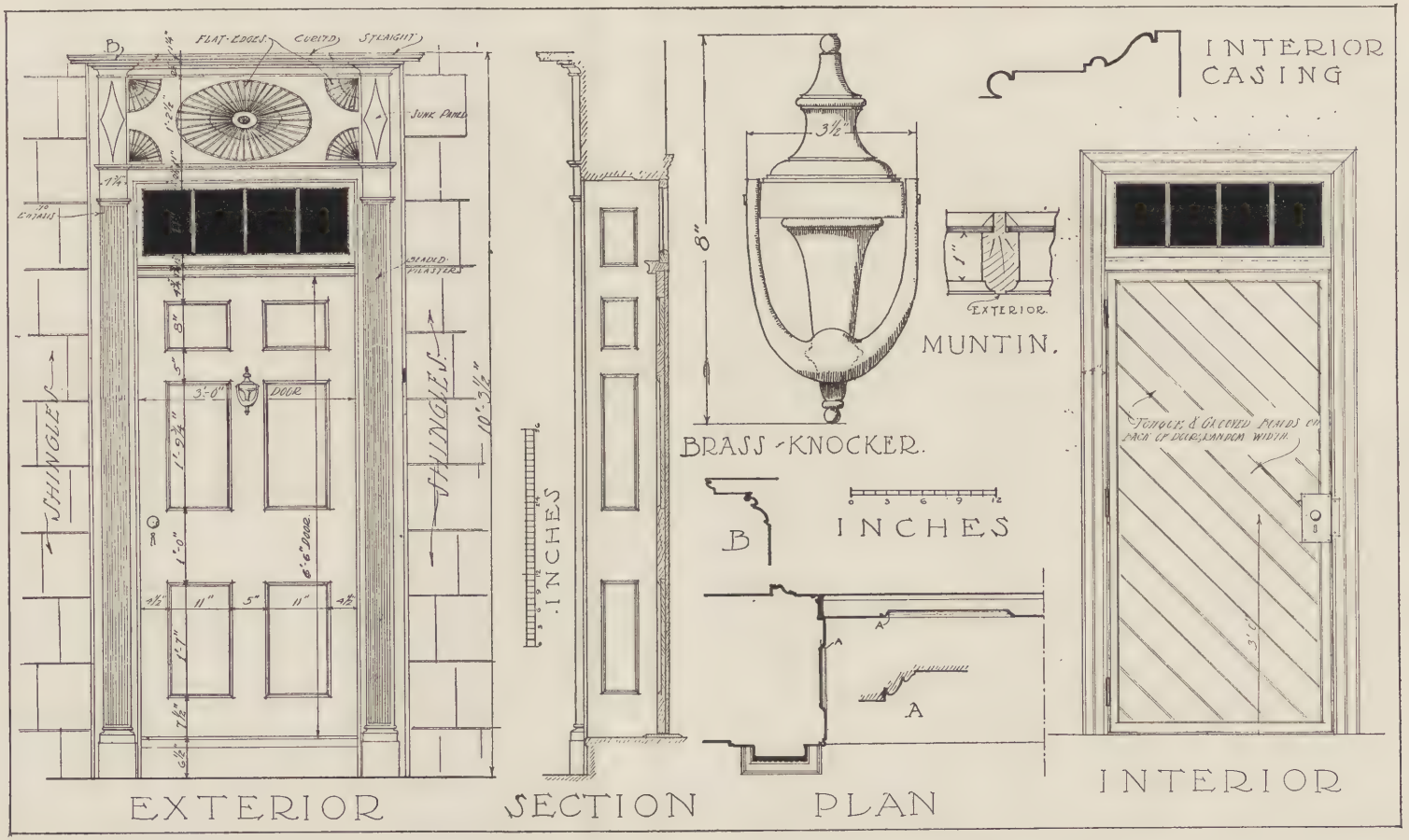
An interesting claim is made that, in 1810, "a sample of the old Colonial paper in the 'court-martial room,' made in cool green panels with a border of morning-glories and doves and urns, was sent to Paris for reproduction. The original panels, lined with buckram, had hung from the cornice of the great parlor for nearly fifty years when Stephen Jumel came into possession, and after the reproduction of the paper on wood blocks, it was rehung in the room for another seventy years."



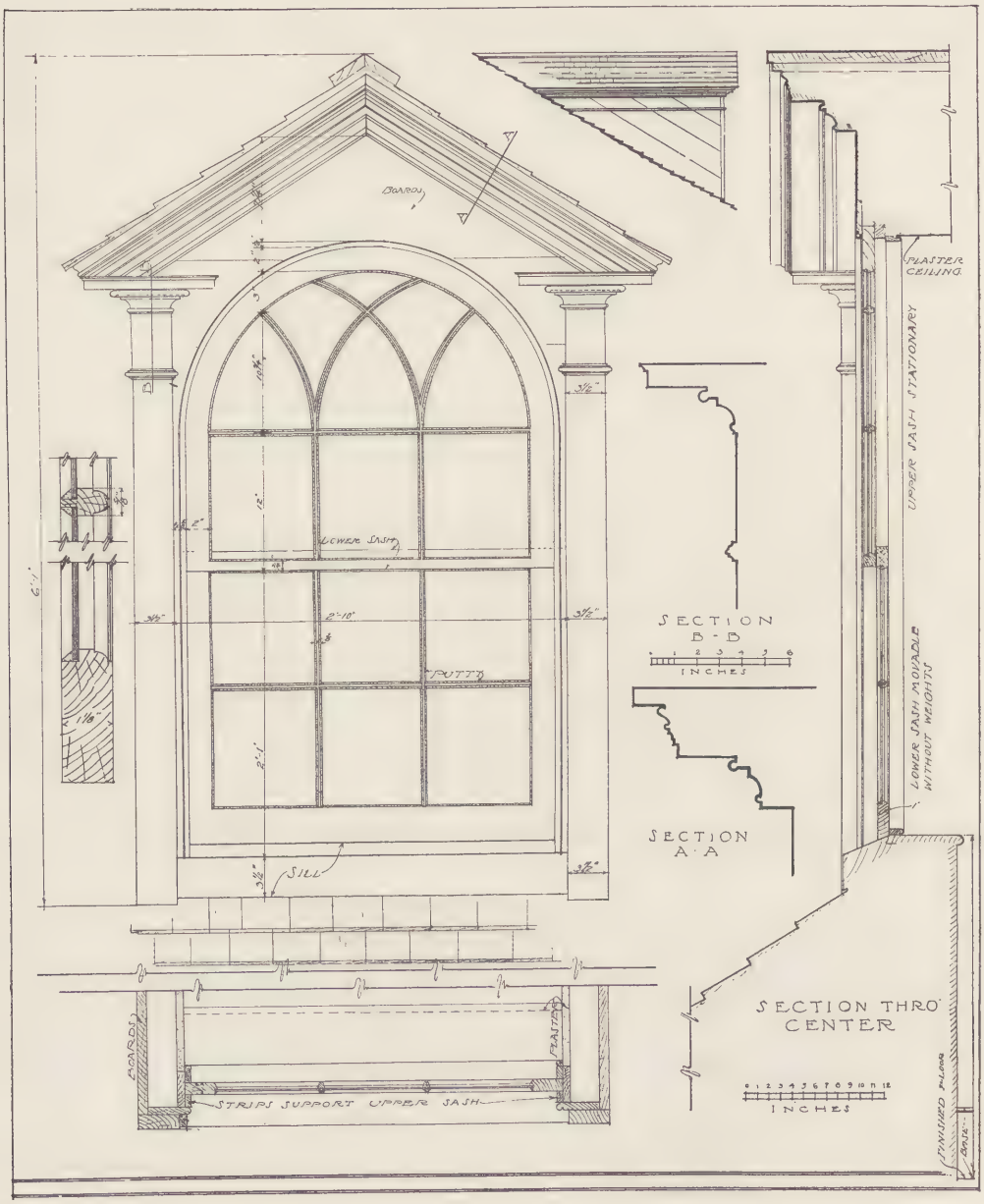
MAIN ENTRANCE DETAILS—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



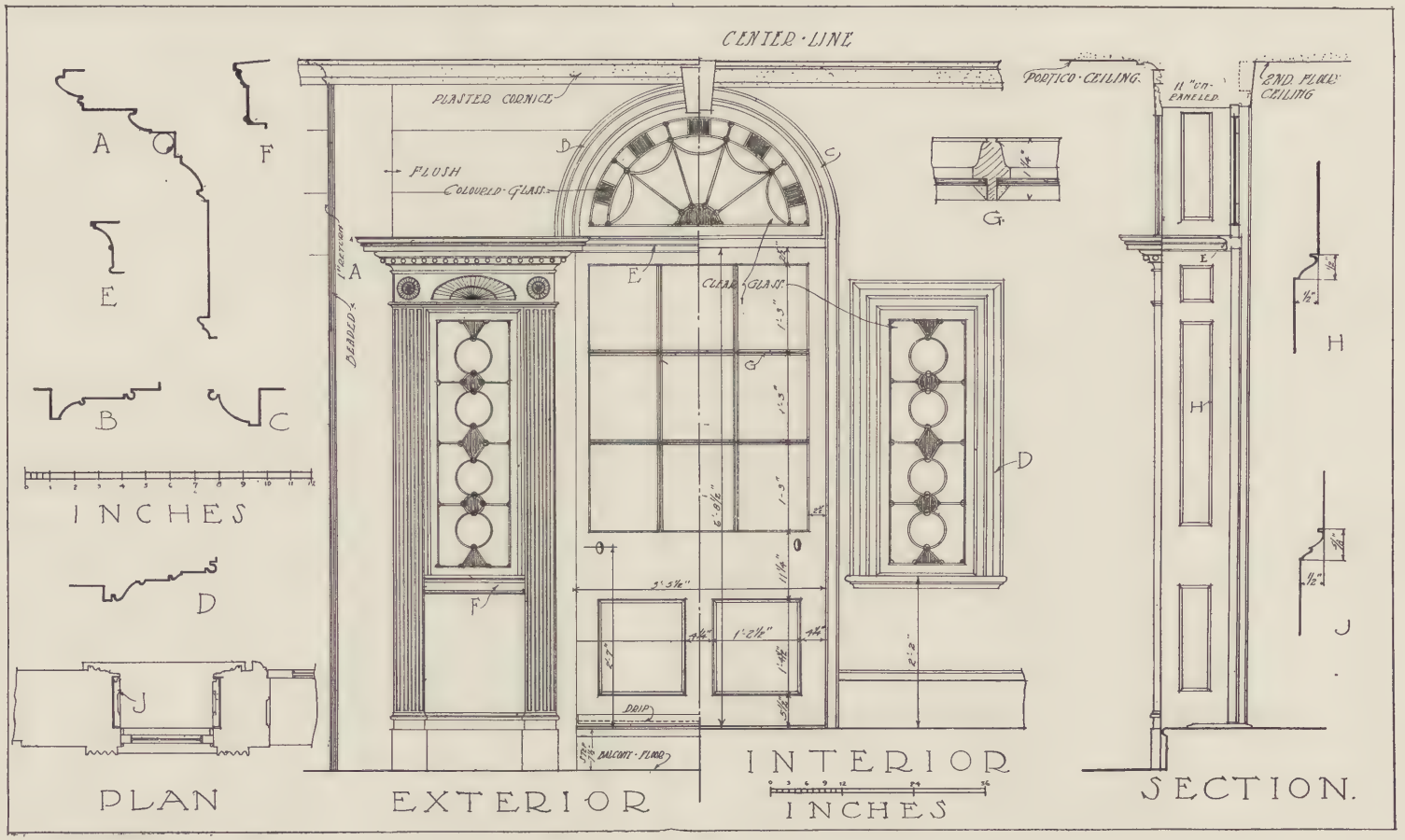
DETAILS OF WEST ENTRANCE—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



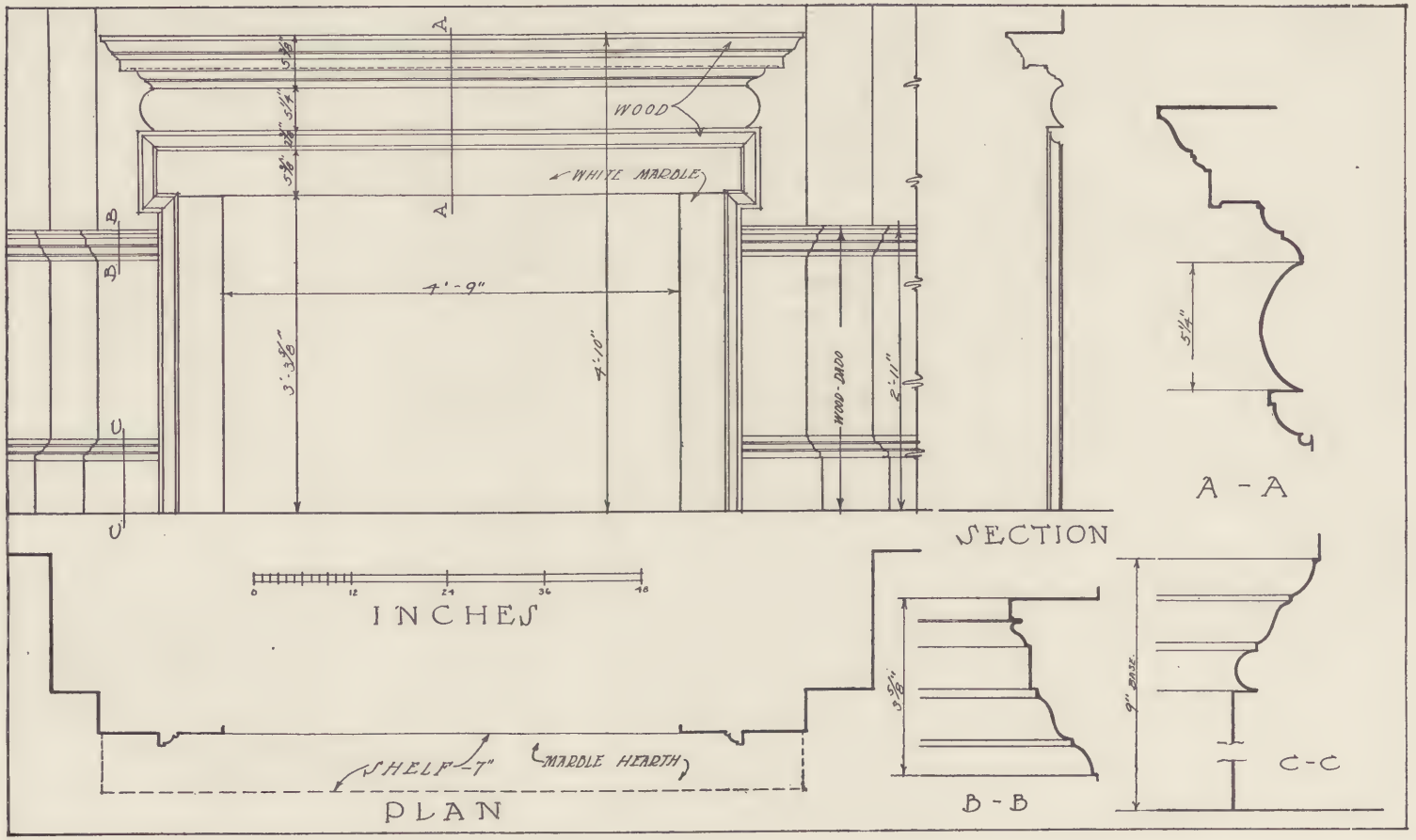
EAST ENTRANCE DOORWAY—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



DORMER DETAILS—THE ROGER MORRIS HOUSE,
OR JUMEL MANSION, NEW YORK CITY.



DOORWAY TO BALCONY—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.

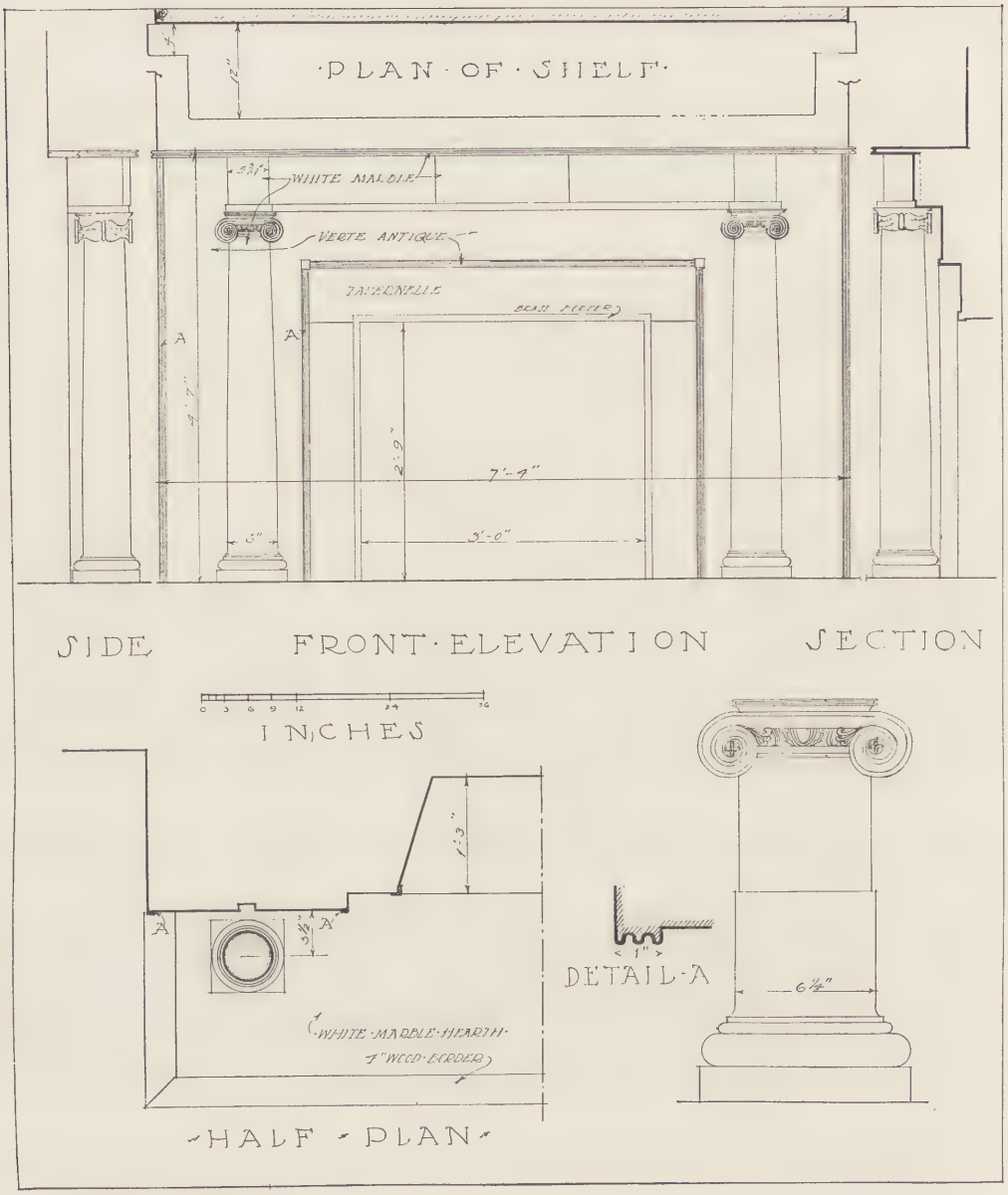


MANTEL IN TEA ROOM—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



Photograph by Charles W. Stoughton in 1886.

COUNCIL CHAMBER, SHOWING JUMEL FURNISHINGS AND WALL PAPER—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



MANTEL IN COUNCIL CHAMBER—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.



DOORS TO COUNCIL CHAMBER—THE ROGER MORRIS HOUSE, OR JUMEL MANSION, NEW YORK CITY.

It is a fact, not to be denied of course, that wall-papers "of expensive styles and artistic variety" were brought to America as early as 1735, and it is quite possible that papers "of the time of Washington" may have been hung in the various rooms in the house. At any rate the "council chamber" is papered at the present time with an interesting reproduction of an old paper which, as we see in photographs made while the original furniture and decorations were in place, was on the walls during the Jumel occupancy. Not long ago a strip of the paper was secured and the present paper was reproduced from it.



OLD WALL-PAPER—ROGER MORRIS HOUSE.

The original sample has toned down during many years to a splendid smoky green color, which naturally could not be reproduced, and the new paper will need many years perhaps to soften down to the interesting colors of the old. The design is reproduced exactly, however.

It will be remembered that this sample is claimed to have been a piece made in 1810 for Stephen Jumel, "who had it reproduced in Paris from samples of the original paper of the time of Washington." It seems hardly credible that this statement can be true. In the first place "the time of Washington" is not very definite and could be as late as the end of the eighteenth century, and therefore not Colonial or "original" at all. Furthermore, it is certain that few alterations, or at least decorations, of so extensive and generous a sort as to include imported wall-paper would have been made between the Morris period, which ended with the outbreak of the Revolution, and the time of the Jumel occupancy.

In order that the paper could have been reproduced, it must have been put on the walls before the Revolution, and at the time the house was new.

The facts that disprove pre-revolutionary origin are not hard to find. The paper in the first place, like all the Jumel furnishings, is of Empire design. It is just such work as one will find—in feeling but not in actual design — in the designs of Percier and Fontaine. If we may draw conclusions from the similarity in the character of the decorative detail found in this paper and in the *Recueil de Decorations Interieurs,* of which the first edition was published in 1812, it would be safe to assign as its period a few years before or after the date of the book.

We also have it on excellent authority (*Old Time Wall Papers,* Sanborn, p. 58) that rolls of paper, as distinguished from the early paper which was printed on small sheets, did not appear in this coun-

try until 1790. Taking these facts into consideration it seems little short of foolish to attempt to claim for this paper the original date of the building, and the natural inference is that in 1810 newly designed paper was purchased by Jumel's agents in Paris without any thought of its being in keeping with Colonial traditions (which the paper is not) or "of the time of Washington."

The plan of the house is interesting and unusual. It is a noticeable fact that each room forms a distinct unit in itself, with no direct connection with other units or rooms. The only vista one gets is along the centre line of the first floor hall from the front door through the hall and toward the fireplace in the "council chamber." And the interest in the building lies more in its detail than in its planning.

The elevation of the building is well handled and evidently designed with a carefully determined idea and a knowledge of how the desired effect was to be secured.

The general proportions of the portico in itself and in its relation to the house are good, and the widening of the space between the centre columns and the emphasis given in elevation to the floor line and the strengthening of the corners of the building with rustications (even if they are nothing but wood nailed to the siding) show more than a country carpenter's knowledge of architectural design.



MAIN ENTRANCE DOORWAY OF THE ROGER MORRIS HOUSE.



DESIGN FOR MAP OF
A SEAPORT TOWN.

~ CERAMIC SGRAFFITO ~
A MODERN VEHICLE FOR ADAPTING THE CARTOGRAPHER'S NAIVE ART TO MURAL DECORATION

BY LEON V. SOLON
ILLUSTRATIONS BY THE AUTHOR

BY many it is maintained that the first essential to the existence of a work of art is that it be independent of any utilitarian purpose. Though this rule is doubtless applicable to art in its more precious form, its acceptance as a universal criterion would mean the exclusion of the applied or decorative arts, thereby withholding recognition from works created with the same impulse and having the main abstract qualities. The esthetic value attached to innumerable obsolete accessories of life, survivals of forgotten centuries and primitive methods, amply proves that the appraisement of art is not discounted by the degree of utility of the item round which it is centered. As a concrete example might be cited the art of the cartographer of former days, whose sense of decoration and gift for fanciful detail has left us a lasting fund of pleasure and inspiration, though the maps and charts so embellished are of scientific interest only as records of the fallacies and ignorance of their day.

This art in its initial stages was of necessity based on vague hypothesis and supplied romance to cover a shortage of data. The early traveler was esteemed as an adventurer of heroic measure, invested by popular prejudice with an atmosphere of mystery, which it was obligatory to indulge if public recognition were sought. Should his actual experiences fall short of the fables of his confreres, it was politic to season them with descriptions of fearful monsters, hideous savages and appalling natural phenomena.

In mapping out a remote territory inhabited by cannibals, the traveler would instruct the artist to draw within the space given to the territory a group of nude savages seated picnicwise around the host, who carved the human remains, hospitably dispensing not less than one limb to each guest. The ocean was freely invested with a variety of perils and terrors; large ships in full rig were but a morsel in the jaws of aquatic monsters, while fierce mermen and treacherous mermaids transformed even the human figure into a sinister object. The elephant, wolf, or other savage animal, would symbolize the characteristics of thousands of square miles, and often constitute the only information imparted. Forests, probably of vast area, would be indicated by a group of three or four trees with birds perched in the branches. In the game forest, the wolf, bear and wild goat rambled among diminutive trees, on rolling hills reaching knee-high, in the midst of which the hunting lodge was drawn to miniature scale.

Cities in those days had not contracted the habit of growing overnight. The engraver, who with strict conscience portrayed every structure, had good reason to believe—the ravages of fire and enemy excepted—that the meanest dwelling depicted would survive his proof.

As the science of the geographer matured, mythological suggestion was gradually eliminated. More accurate systems of measuring distance and greater facility for travel rendered any items undesirable other than those relating to proved locations. Decorative features were regarded with growing distrust from having been originally used as a shield behind which inadequate or fictitious information had intrenched itself, with the result that today the map is entirely denuded of its original beauty.

The value of research as a stimulant to the imaginative faculty is rated as follows by Sir Joshua Reynolds: "The more extensive your acquaintance is with the works of those who have excelled, the

more extensive will be your power of invention." The field of the antiquarian holds vast treasures for the artist seeking inspiration; many of the lesser arts, when once searched, will encourage the investigator with the certainty that generous reward will speedily recompense study.

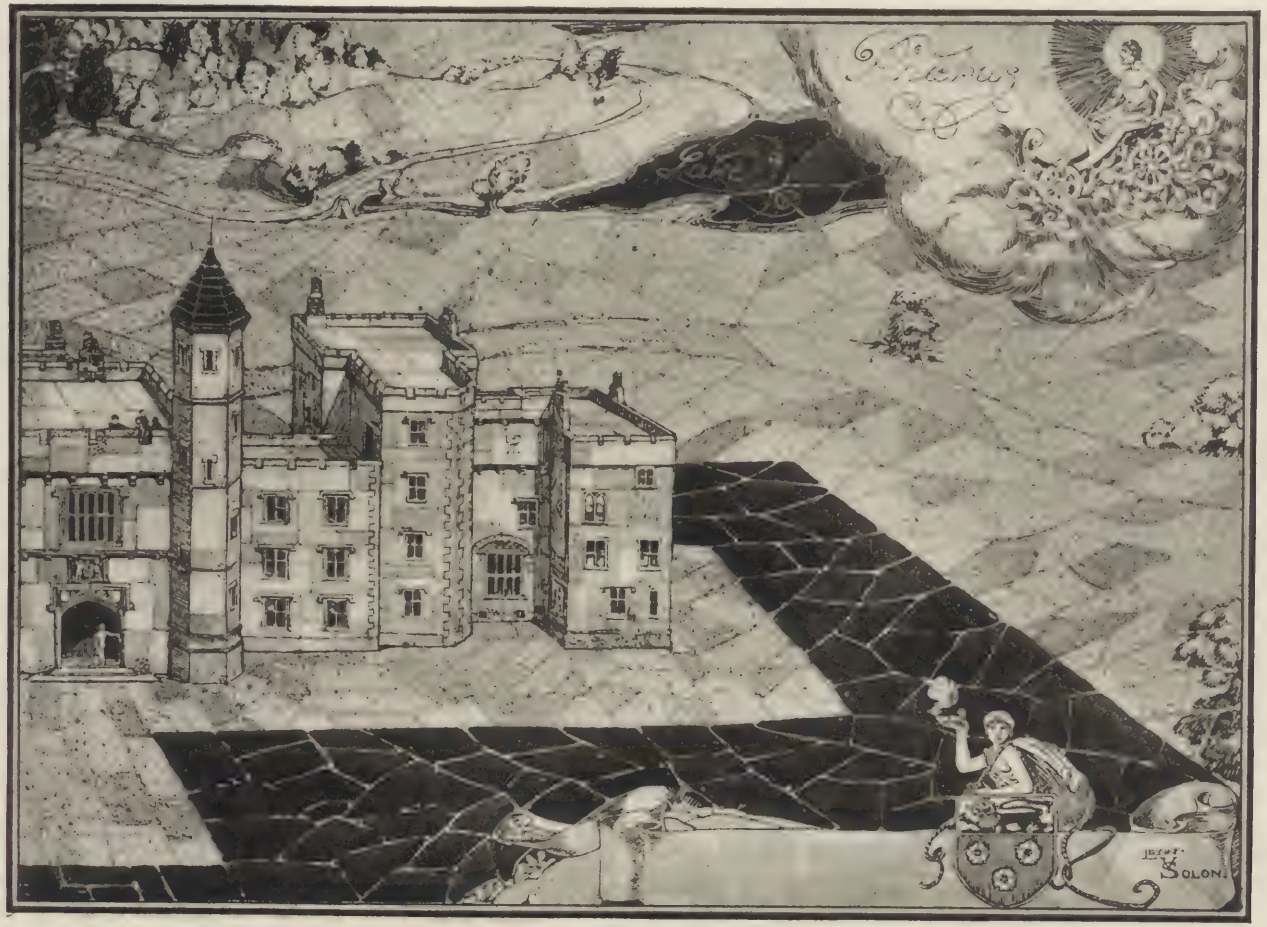
The stress of modern conditions and the exigencies of life no longer permit the artist to indulge his time-honored privilege of waiting till fickle Inspiration passes his way. A review of the progress of art during the last half century prompts the belief that those unusual and varied points of view essential to origination are more surely engendered by a study of kindred efforts than by mental concentration exercised after deliberately divorcing imagination from memory.



DETAIL TAKEN FROM AN ANCIENT MAP, SHOWING A GAME FOREST.

Those guiding and approving the art tendencies of today not infrequently accord to an individual perception of a familiar subject the same recognition that they give to an original discovery. The pronounced appetite of a certain section of the public for novel motifs in decoration often causes those searching them to traverse arid tracts in the hope of finding fruitful untrodden paths, forgetful of the wealth of suggestion that is theirs by professional inheritance. The mental concentration and introspection that the artist exerts to stimulate imagination often result in the resuscitation of an almost effaced recollection, which he seizes and makes the nucleus of his scheme; were the original traceable and referred to during the evolution of the work, there is little doubt that the production would frequently gain thereby. The danger of contact with a virile art influence is in inverse proportion to the strength of the artist's individuality.

The sum total of human achievement in art might lead us to believe that all that is worth doing has been done, had we not the knowledge that at previous periods in the history of art the observer of the day had similarly deduced that versatility must have exhausted its resources. There seems to be no space left for any serious new school between the serried ranks of those already established, which provide so many cloaks with which to garb Nature. It is not the destiny of the majority to create new principles, but many may derive both benefit and credit by restoring those arts to favor that



SECTION OF DESIGN FOR MURAL DECORATION TO BE USED IN THE ENTRANCE HALL OF A COLLEGE.



DESIGN FOR MAP OF A SEASIDE ESTATE.

suffer neglect through their depreciation in human interest.

The map as an exact document clearly did not need decorative embellishment. As this was gradually eliminated the energy of the designer and engraver found employment in other fields, but unfortunately a very individual form of decoration was lost. Its decay was due to the ascendency of the two arch enemies of the spontaneous—geometry and mathematics. The fact that its elimination was caused by a preponderance of qualities sought in art is a forcible argument in favor of an attempt to revive it in a purely decorative form.

Its rehabilitation must be effected in some new sphere in which those peculiarities and mannerisms which reveal so much charm in the ancient examples may constitute valued additions to the existing resources of art activity.

In many of the most beautiful Flemish paintings of interiors the map figures prominently, often as the chief mural ornament. However, recognition could hardly be accorded it as having the status of a mural decoration, even in the sense in which we regard the tapestry. Nevertheless, the seed of suggestion is sown by the Flemish painting of interiors and the possibilities of development promise results well in accord with our general aims.

Certain unadorned spaces in buildings create much the same effect on our senses as that produced by the unresolved chord in music. The use of the conventional type of mural painting would be either inappropriate or excessive; we need some motif which partly justifies its existence by a direct reference to its surroundings, an expression extremely hard to convey by means of historic ornament.

In the great entrance halls or corridors of national or civic institutions, or in certain parts of the greater country houses, opportunity for decoration of this type occurs.

In addition to the architectural interest of the buildings themselves the surrounding property often contributes elements which in the hands of the ancient cartographer would have become a composition of beauty and interest—a fascinating and more or less veracious record for

posterity despite allegorical flights. The choice of a new alliance among the architectural crafts for this venerable art must be guided by the following considerations: that delicacy and precision of detail shall be practicable in the new material; that simple polychrome effects of a permanent nature be available; that those qualities associated with structural materials be possessed which will permit the work to become an integral part of the building.

A consideration of the various structural materials points to the potter's clay as having the most ample qualifications to meet the technical and decorative requirements. The many technical resources placed by craftsman and chemist at the disposal of the artist give the choice of a variety of solutions for each problem.

A review of the varied processes and methods which might be best adapted to the peculiarities of the cartographer's style singles out ceramic sgraffito as offering the greatest facility for rendering delicacy of line in two colors.

The thin coat of light clay covering the red clay slabs is worked on when still moist and is an excellent substance in which to engrave the outline or shading with a pointed tool. The line is drawn cutting through the white clay, showing the reddish ground, the white clay being scratched away where dark masses are needed. The thickness of the white layer is such that effects of a delicacy comparable to the original can be attained with the utmost freedom. This coating can be stained with metallic oxides to an infinite number of tints. The additional polychrome resources and textures realizable by glazing are too extensive even for enumeration here.

The best decorative effect would not be realized at miniature scale in this material, neither would it be appropriate for the purpose under discussion. As the largest unit should not measure more than eighteen inches in length and breadth, panels for mural decoration would necessarily be cut in sections before firing. The grouping of the ornamental masses would control the contours of each section, as it does with the leading of stained glass, converting a technical necessity into a decorative asset.

The manipulation of the process is extremely simple and demands only a free and unhesitating line; in other words, it is merely a question of freehand draughtsmanship. It would be difficult to find another artistic method so free from a specialized technique, or in which the novice would encounter fewer pitfalls. The firing renders the work secure from disintegration and suitable for building into the structure. A film of glaze added introduces modifications in the texture and color of the two clays; a glaze could be applied giving the tints of old parchment with all its irregularity and stains and at the same time converting the reddish clay to a rich sepia tone. Where heraldic emblems or coats of arms are introduced the appropriate colors and gilding could be produced without the slightest difficulty by a variety of means.

The accompanying illustrations show the modification of line treatment best adaptable to sgraffito. The solid masses are obtained by scratching off the thin coating of clay. The unconscious modification of form and detail which naturally evolves itself as a result of working in a foreign medium develops rapidly with the simplicity of manipulation; this feature should constitute a strong appeal to artists valuing variety in artistic expression.

A NEW INFLUENCE IN AMERICAN ARCHITECTURE

By MICHAEL A. MIKKELSEN

AN interesting field for speculation is opened up by Mr. Carl F. Pilat's article in the Architectural Record for June. Mr. Pilat, through a *questionnaire* addressed to a selected list of fifty State colleges and universities, learned that the majority of the listed institutions were engaged in extension work in architecture or in landscape gardening, or in both.

Probably not many of our readers were aware of the great number of State and Federal agencies occupied in advancing popular education in these arts. Mr. Pilat, it will be remembered, enumerated six Federal bureaus and commissions, besides thirty-four State colleges and universities.

The work is carried on mostly by agricultural colleges. It is an offshoot of the Rural Improvement movement, and possibly the fact of its being subsidiary to a notably conspicuous propaganda has tended to obscure its intrinsic importance.

Landscape architects are in touch with matters pertaining to Rural Planning, the more modern term for Rural Improvement, and Mr. Pilat, by virtue of his position as Landscape Architect for the City of New York, probably has access to a larger literature on this subject than most private practitioners. Yet he was himself surprised at the results of his investigation for the Architectural Record, and when these were announced at a meeting of the New York Chapter of the Society of Landscape Architects they were received there with no less surprise.

The June article was to have been followed by a second paper giving a bibliography of the bulletins and other literature issued by the various State and Federal agencies in question, but, owing to Mr. Pilat's appointment to the Cantonment Division of the Quartermaster's Corps, U. S. A., his work on this supplementary article has had to be put aside for a time.

Meanwhile, as we began by saying, the June article opens up an interesting field of inquiry. What effect will this popular educational work have on the allied arts of architecture and landscape architecture, particularly on the former?

The work is of recent origin. In many of the institutions it has not passed beyond a rudimentary stage, comprising perhaps a few popular lectures, chiefly because a new department is generally restricted in the matter of appropriations until its usefulness and popularity have been demonstrated, which is particularly true of institutions supported by taxation. However, the older departments conducting extension work in architecture and landscape gardening have evolved a general plan or group of activities which each of the younger departments hopes to achieve; and the volume of extra collegiate education, or extension work proper, is growing rapidly, with the prospect of becoming general throughout the country, reaching the great bulk of the population in rural communities.

Until recently the classes comprising this population were practically divorced from contact with art in any form. There is no traditional peasant art in America, and even where the rural classes have had the means to buy they have not had the education to appreciate the individualistic art of professional artists. Their houses have been built for them by the carpenter, the mason or the speculative builder, while no trained thought whatever has been given to the interior decoration of their homes or to the adornment of their home sites.

Today, in not a few of the States, there is a systematic campaign to bring art into the rural home through a variety of avenues—circulars, bulletins, public lectures,

demonstrations, exhibitions, popular short courses of instruction, the gratuitous services of experts in solving the particular problems of individuals in home making or the more general problems of communities in constructing schools, public buildings, parks and playgrounds. The campaign embraces, besides architecture and landscape gardening, interior decoration and a variety of household arts and crafts. It is conducted with the high enthusiasm of a new cause, and the Federal and State agencies engaged in it act both independently and in cooperation with each other and with granges, art societies, town officials, public libraries, churches — indeed, any organizations which can help to spread the gospel of art among the masses.

Art, it is often said, is a reflection of the life of the people. Of modern art, this is true mainly in a negative sense; the people have no active share in determining its expression. The art of architecture, for example, is eclectic, individualistic, the product of academic study of historic periods of design.

The art of architecture in America is, indeed, on a far higher plane than it was; but it is so partly because it is better instructed, partly because it has settled down to the conviction that, eclecticism being inevitable, the main qualities of design to be sought after are distinction and refinement. Still another function predicated of design is that it shall express, so far as may be, the personal taste and habit of life of the architect's client, whereby the general tendency in the direction of individualism is of course reinforced.

If architects have advanced in knowledge, so also have the well-to-do classes who employ them—mostly city people, the fluid wealth of the country being largely in the cities. The advance has been notable both in general culture and in the capacity to appreciate art. But the more universal academic education and the foreign travel which have raised the level of culture among the well-to-do have wrought for eclecticism and individualism, and so has the growth of wealth, for questions of cost have not debarred the adaptation to American conditions of foreign models. Like the architects, the well-to-do classes who employ their services have no artistic convictions in common except that the design of houses should have the qualities of distinction and refinement and should express something of the personality of the occupants.

Under the circumstances it is readily apparent why architecture is eclectic and individualistic, why it is not a reflection of the life of the people, and why, consequently, there is no such thing as a distinctive American style of architecture.

One is told that the conditions for the growth of a style characteristic either of a people or of a period disappeared with the close of the Middle Ages.

Gothic art took the inspiration for its mystic symbolism from the Bible, and much of its unity of expression was imposed upon it through the hegemony in art exercised by the monastic and military orders, the great builders of the Middle Ages. There was a third important element in the final evolution of Gothic architecture, namely, the necessity for economy of construction. The Middle Ages were not rich in money. The building of a cathedral was a heavy tax on a community, and the Cistercian order had economic as well as religious motives for its revolt against what was considered extravagance in building and ceremonial of the older Benedictines. Bernard of Clairvaux, its foremost member, urged his masterworkmen to find a system of building whereby, through balancing thrusts, the bulk of masonry in a structure could be greatly reduced. They found it, and Gothic architecture displaced the Romanesque.

Modern art will probably never be induced to take its inspiration and motives mainly from a single source. It is quite possible to believe, however, that shaping influences may arise analogous, on the one hand, to the tendency toward uniformity exerted by the churchly orders, and, on the other, to the impulse toward reducing construction to its simplest possible organic elements.

May not such influences come into op-

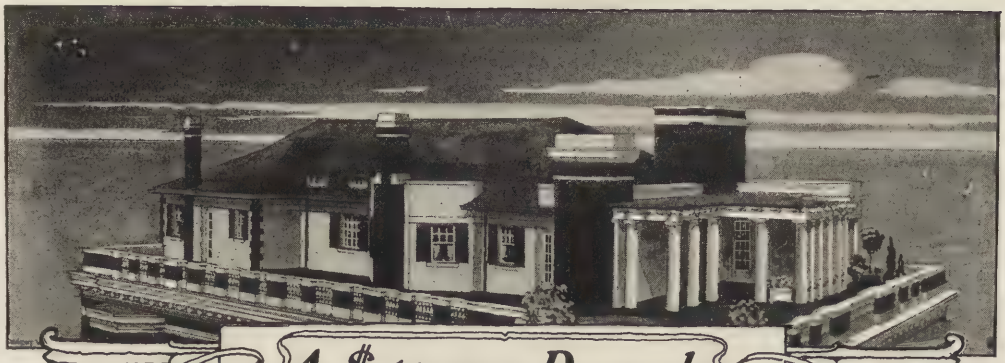
eration through the extension work in architecture among the great agricultural population of this country?

The extension worker who advises a farmer on the building of a house must justify his advice by its efficiency and economy. He is less concerned about expressing in the design his own individuality or that of his client than he is about working out the economic problem of the prospective house. He will conceive of the house as first of all a place where certain kinds of work are to be performed by a given number of people. The tendency will be to study the work, to classify it, and to devise typical plans that will fit the different classes. The plan, in turn, will influence the design. And as economy of construction will be a leading consideration, those materials will be used which are cheapest—wood in some localities, stone, brick or concrete in others—while ornamental details will be used sparingly.

It seems, therefore, quite within reason to assume that a number of types of houses will be evolved, each representing some phase of the economic life of the common people. There will be a degree of uniformity both on account of the evolution of types and on account of the use, each in its proper locality, of materials native to or abundant in the several parts of the country. There will be a similarity without sameness, one of the first requisites for the genesis of any distinctive style.

Now, we do not declare that this extension work in architecture by Federal and State agencies, principally agricultural colleges, will give rise to an American style of design. There is enough dogmatic writing on architecture. We have no wish to add to it. But we do believe that this extension work, as it grows in volume, will react strongly and possibly in unforeseen ways upon the art of architecture in America. We may at least expect to see homes of pleasing appearance in agreeable surroundings, in place of the nondescript buildings on bare, neglected sites that are now too common in the farming communities.

The educational movement for "Rural Improvement" or "Rural Planning" is one of the most noteworthy and inspiring of the social and economic influences which have become operative in America within the present generation. It has tremendously increased the efficiency of the rural population for production and consequent creation of wealth. Its ultimate aim is to make life on the farm as physically wholesome, economically secure and intellectually varied as that in the larger cities. To achieve this aim it is necessary to educate the rural population in home-making—in architecture, in landscape gardening, in the various household arts and crafts. Backed by the Federal and State Governments, and supported by the best thought of the country, the Rural Planning movement has gained so much headway that any new phase of educational work which it takes up is bound to be carried through. As yet the extension work in architecture is a mere beginning, a mere promise. However, it has been begun in the right way, by trained architects occupying its professorships and in cooperation with professional bodies, including, by the way, several chapters of the American Institute of Architects.



A $40,000 Bungalow on the Roof of a Chicago Apartment House

William E. Walker, Architect

By Robert H. Moulton

THE Lake Shore Drive is to Chicago what Riverside Drive is to New York; each is an ultra exclusive boulevard lined with splendid residences and apartment buildings. Each, also, affords the luxury of a magnificent water view—Lake Michigan and the Hudson River, respectively. The idea of erecting a bungalow in either of these boulevards would seem preposterous. And yet that is exactly what a Chicago architect, William E. Walker, has done in the case of the Lake Shore Drive—only the bungalow is not down at the street level, but perched on the top of an eight-story, half million dollar apartment building.

While the idea of utilizing the roofs of large buildings as a dwelling place is not entirely new, this is declared to be the first instance where a complete twelve-room house, costing $40,000, has been erected in such a location.

It was while designing the apartment building, in which he himself expected to occupy an apartment, that Mr. Walker conceived the bungalow-on-the-roof plan. His first idea was to construct a roof garden to be used jointly by the tenants of the building; and this in turn suggested a complete, separate home for himself. The plans of the building were, accordingly, changed to carry out this scheme; and the result is a most novel and satisfactory dwelling place.

While the architect could readily anticipate the advantages of the better view which this lofty elevation would secure to himself and his family, the actual occupation of the bungalow brought to light numerous other benefits of which he had never dreamed. He found that the air was not only better at this height, but cooler by several degrees in summer than at the street level. He also discovered that window screens were unnecessary, since the site of the bungalow is above the fly belt, the mosquito line, and even above the realm of that occasional summer pest, the sand fly. Then, of course, there is absolute privacy as well as perfect security from burglars.

The bungalow is forty-five by ninety feet, with French windows and doors opening on a terrace whose outer dimensions are sixty by one hundred and twenty feet. On the east frontage, facing Lake Michigan, this terrace is twenty feet wide by fifty feet long, while on the two sides it varies from ten to fifteen feet in width. The building is of white



THE PROMENADE, LOOKING TOWARD THE SERVANTS' QUARTERS—BUNGALOW ON THE ROOF OF A CHICAGO APARTMENT HOUSE.
William E. Walker, Architect.



THE PROMENADE, LOOKING TOWARD LAKE MICHIGAN—BUNGALOW ON THE ROOF OF A CHICAGO APARTMENT HOUSE.
William E. Walker, Architect.



UNDER THE PERGOLA—BUNGALOW ON THE ROOF OF A CHICAGO APARTMENT HOUSE.
William E. Walker, Architect.



THE PERGOLA, FACING LAKE MICHIGAN—BUNGALOW ON THE ROOF OF A CHICAGO APARTMENT HOUSE.
William E. Walker, Architect.

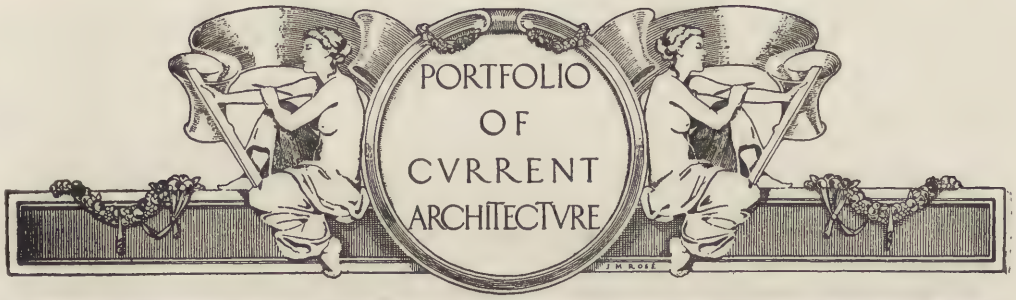


THE BUNGALOW IS ON THE TOP OF THE APARTMENT HOUSE IN THE FOREGROUND, FRONTING ON LAKE SHORE DRIVE, CHICAGO.
William E. Walker, Architect.

cement, with a green slate roof, green shutters, and red brick chimneys and facings at the corners. A balustrade, four feet high, rims the terrace.

On the lake side, opening out from the dining room and the main hall, there is a shaded and pillared pergola, eighteen by twenty feet in size, where in warm weather meals are served. There is also a fireplace under the pergola where logs may be burned in cool weather.

The bungalow contains five bedrooms, each with a bath, a living room, a dining room, a reception room, an entrance hall, a kitchen, a butler's pantry, and a ladies' cloak or reception room for use when giving large parties. The dining room is so arranged that it has exposure on all four sides. In addition to these rooms, there is a large attic in the sloping roof containing a completely equipped gymnasium twenty-four by seventy feet.





VESTIBULE—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



ANTIQUE GATES LEADING TO ENTRANCE HALL FROM CORRIDOR—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



AT FOOT OF GRAND STAIRCASE; WOODWORK PAINTED AFTER THE MANNER OF THE STAIRCASE AT KNOWLE PARK, ENGLAND—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



AT HEAD OF GRAND STAIRCASE—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



RECEPTION ROOM, TREATED IN WOOD PANELING PAINTED AFTER THE MANNER OF THE GREEN ROOMS OF THE TIME OF SIR CHRISTOPHER WREN —RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



DRAWING ROOM; WOODWORK ADAPTED TO FRAME A SET OF PAINTINGS BROUGHT FROM ONE OF THE OLD CHATEAUX OF FRANCE—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



GREAT HALL, WITH DOUBLE-STORIED STONE MANTEL AND REPLICA OF PLASTER CEILING FROM THE REINDEER INN AT BANBURY—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



GREAT HALL, OAK SCREEN AND MINSTREL GALLERY —RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



BAY WINDOW AND SCREEN OF GREAT HALL, IN THE CHARACTER OF ELIZABETHAN WORK AT HATFIELD HOUSE—RESIDENCE OF REGINALD DE KOVEN, ESQ., NEW YORK CITY. JOHN RUSSELL POPE, ARCHITECT.



STAIR HALL—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



ENTRANCE HALL—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



ENTRANCE HALL—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



LIVING ROOM—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



LIVING ROOM—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



LIVING ROOM, LOOKING INTO STAIR HALL—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



DINING ROOM, LOOKING INTO HALL—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



DINING ROOM—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



DINING ROOM—HOUSE AT ST. MARTINS, CHESTNUT HILL, PHILADELPHIA. EDMUND B. GILCHRIST, ARCHITECT.



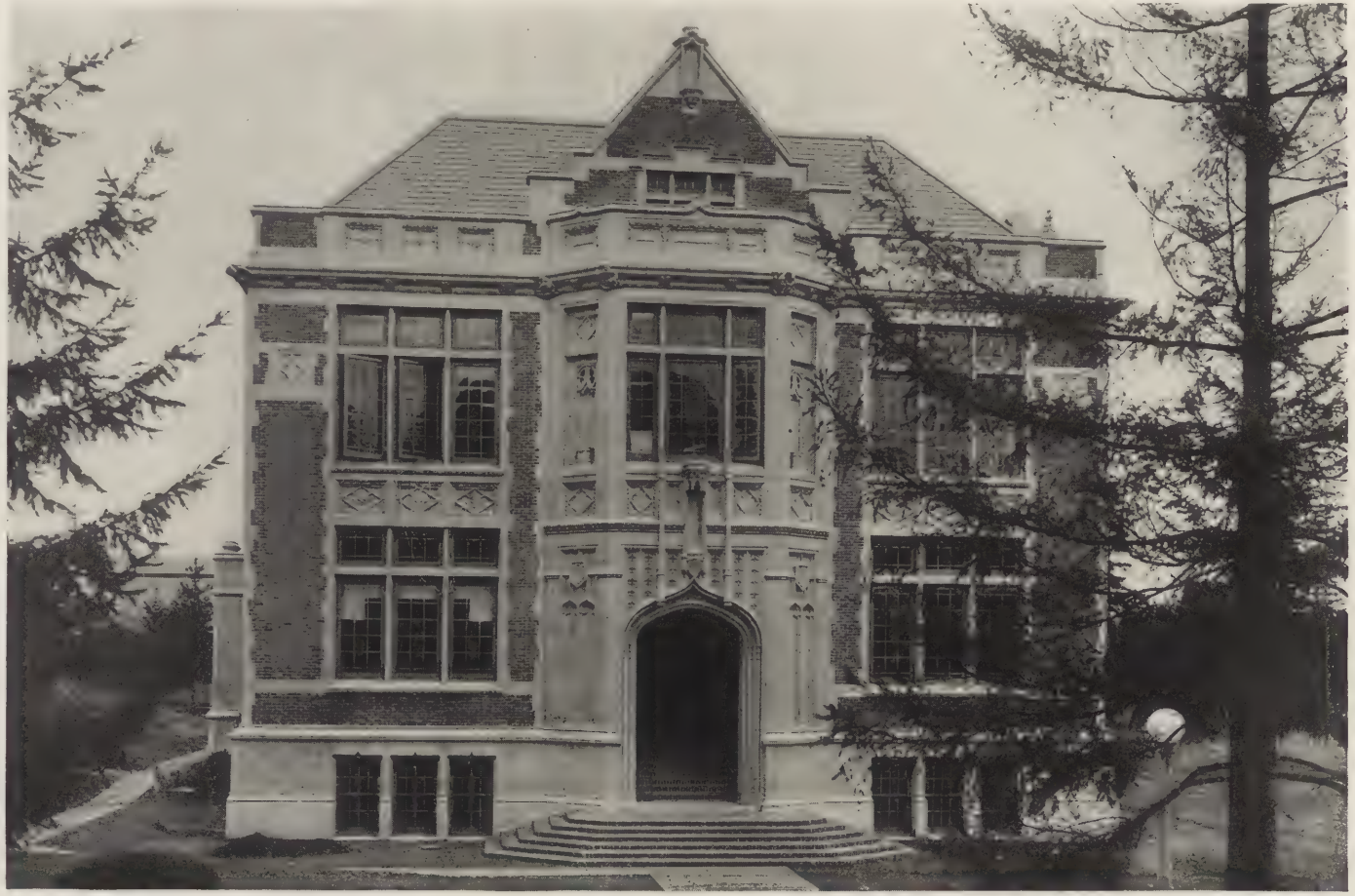
ADOPTED PLAN OF GROUNDS—UNIVERSITY OF WASHINGTON, SEATTLE, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



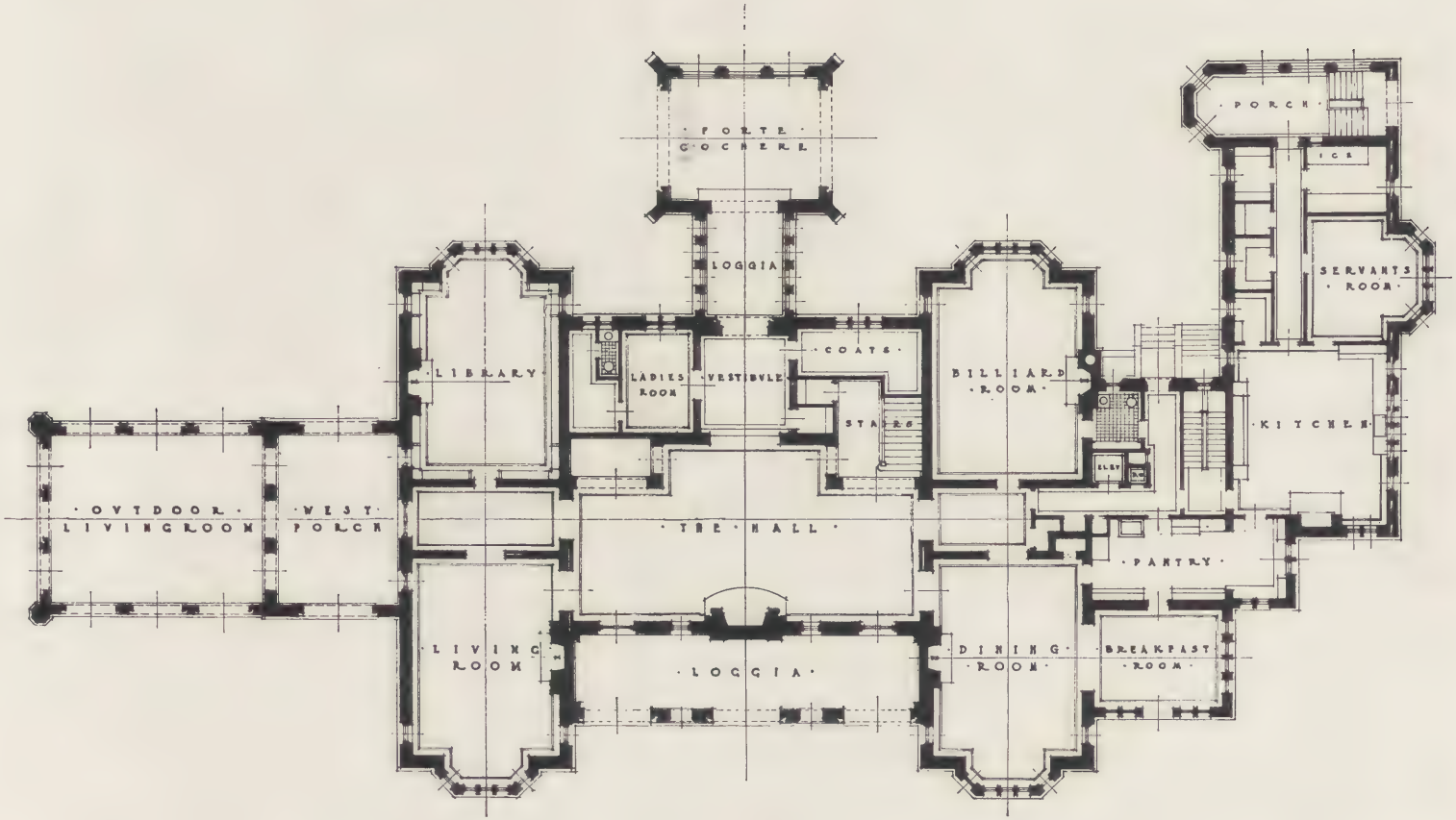
HOME ECONOMICS BUILDING, UNIVERSITY OF WASHINGTON, SEATTLE, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



ENTRANCE—HOME ECONOMICS BUILDING—UNIVERSITY OF WASHINGTON, SEATTLE, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



HOME ECONOMICS BUILDING, UNIVERSITY OF WASHINGTON, SEATTLE, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



FIRST FLOOR PLAN—RESIDENCE OF LEWIS H. LAPHAM, ESQ., NEW CANAAN, CONN. WILLIAM B. TUBBY, ARCHITECT.



LIVING ROOM—RESIDENCE OF LEWIS H. LAPHAM, ESQ.,
NEW CANAAN, CONN. WILLIAM B. TUBBY, ARCHITECT.



VIEW FROM GARDEN WALK—RESIDENCE OF LEWIS H. LAPHAM, ESQ., NEW CANAAN, CONN.
William B. Tubby, Architect.



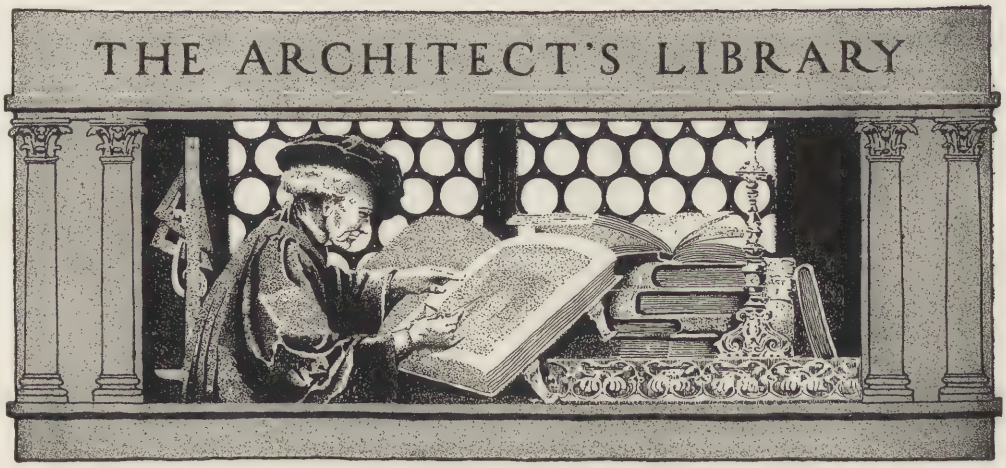
ANOTHER VIEW FROM GARDEN—RESIDENCE OF LEWIS H. LAPHAM, ESQ., NEW CANAAN, CONN.
William B. Tubby, Architect.



RESIDENCE OF LEWIS H. LAPHAM, ESQ., NEW CANAAN, CONN. WILLIAM B. TUBBY, ARCHITECT.



VIEW OF GARDEN, FROM TERRACE—RESIDENCE OF LEWIS H. LAPHAM, ESQ., NEW CANAAN, CONN. WILLIAM B. TUBBY, ARCHITECT.



MR. EMBURY'S "ASHER BENJAMIN"

By RAWSON W. HADDON

AN intimate knowledge, coupled with a capacity for analytical study, is a prime necessity to the architect whose purpose is to specialize in the design or study of any historic style or period. His knowledge must not only embrace the general tendencies of the period and the usual forms and details of it, but must include the smallest characteristics and mannerisms of the style. He must know, Frank Wallis wrote, all "the intimate detail of a dentilled turn in the cornice, the habits of clapboards and rake-mouldings, and the customs and manners of gables and dormers," and much else as well.

At the present time, when Colonial architecture is being studied and reproduced with far greater care than at any time during the half-century or so since its renaissance, an inspection of new work only too often reveals deficient knowledge of many of the important features of the style.

In the original Colonial product we find at least three distinct and separate divisions of the style—the earliest, almost Jacobean work; the later, pure Colonial work of classic design; and the third, which reached the height of its development between 1800 and, at the latest, 1815.

The salient characteristics of the third period of Colonial design are found in a general fineness or delicacy of ornament and in the peculiar form of detail used. While often compared with the work of the Adam period, the comparison does not seem well advised except as it takes into consideration the similarity of delicate treatment and ignores a complete lack of similarity of actual design.

It is certain that, except in special cases, this third type of Colonial is the best fitted for modern reproduction and is most frequently used in work at the present time; and it is the one which must be used in its purest form without any intermixture of the earlier types.

A splendid and authoritative source of information relating to the period for the study of the work in the draughting-room, as well as for the uses of historical research, is found in the various books issued by Asher Benjamin.

On the whole, it is safe to say that these books, even though not the earliest ones on architecture printed in America, are

among the most interesting and, for present-day uses, most valuable of early American architectural publications.

That they are not far more generally known and used is due to no other fact than that of their scarcity. Few libraries, even very large ones, own a complete set of the books, and for the individual architect to assemble a set is practically impossible, except by some unusual bit of good luck.

For this reason a republication of them is especially desirable, and the only wonder is that none has been undertaken before. The present reprint* has as its editor Mr. Aymar Embury II, whose knowledge and appreciation of Colonial architecture inspire unqualified confidence in his selection of plates.

The Asher Benjamin books are five in number, commencing with *The Country Builder's Assistant,* published in Greenfield, Mass., in 1805. It is interesting to note that the detail, in most instances, in *The Country Builder's Assistant* follows more closely classic precedent than the detail in the later books.

Indeed, the publication of the second book may be taken as the point at which "the style of building in this country" began, in detail, as well as in its general design, to differ "very considerably," as Benjamin says, from that of Great Britain and other countries in Europe. The design and proportion of the orders were changed in many important respects at this time and with most happy results.

The fact that this later Colonial delicacy of design, as compared with the more robust earlier Georgian, was an intentional departure and not a gradual and unconscious development, is established from the author's statement: "Being the first who have for a great length of time published any New System of Architecture, we do not expect to escape some degree of censure. Old-fashioned workmen, who have for many years followed the footsteps of Palladio and Langley, will, no doubt, leave their old path with great reluctance. But impressed as we are with a conviction that a reform in some parts of the system of architecture is loudly demanded, and feeling a confidence from our knowledge of the theory, and from having long been conversant in the practical part of that science, we have ventured without the aid of subscription, to exhibit our work to the public view."

Illustrations in the first volume range from structural details and drawings of the orders to design for Tuscan, Doric, Ionic, and Corinthian "fronts" or doorways with transom, mantel designs, and cornices, and some rather interesting but poorly engraved schemes for residential and ecclesiastical buildings.

The second Asher Benjamin book, *The American Builder's Companion; or a New System of Architecture* (Boston, 1806), was written in association with Daniel Raynerd, an architect and stucco worker. It is the one referred to above as marking the point of change between the second and third Colonial periods, and it is without doubt the most interesting and important of all the volumes published.

In the designs which the volume contains, and especially in the details, classic inspiration is reduced to a minimum, and the pages abound with delicate "fancy cornices," which are not only well designed, but charmingly drawn and engraved. The exterior designs of the buildings illustrated show a marked improvement over the earlier work and an interesting discussion of Benjamin's theory for the design of cornices is given with an explanatory plate.

As cornices still "make a very considerable part of architecture," it may not be out of place to reproduce his remarks in full. The advice he gives is as sound and as well worth attention now as it was when it was written:

"As cornices make a very considerable part of architecture, there cannot be too much care taken to make them appear to as much advantage as possible, and to manage their mouldings so as to take up no more room than is sufficient to answer the purpose; for it ought to be remembered that every inch that is added to the height of the cornice on the wall line, beside increasing size and expense, is robbing so

*Asher Benjamin: A reprint of *The Country Builder's Assistant, The Rudiments of Architecture, The American Builder's Companion, The Practical House Carpenter, Practice of Architecture,* by Asher Benjamin. Plates and text selected and edited by Aymar Embury II, Architect. New York: The Architectural Book Publishing Co. $12.50.

much from the height of the wall, which is increasing another expense; therefore, a large projection ought to be recommended. It has always been remarked that the Doric cornice has a more noble appearance than the cornice of any other order; and by examination we find that its parts are few in number, but bear a just proportion to each other, and are of simple construction; and that it projects one-fourth more than it rises on the wall line, which is one-fourth more than any of the other orders. Now, if this is all the Doric order has to give it a preference, for it really has nothing else, we can easily imitate it; at the same time making a saving of nearly one-fourth part of the expense. As we have had a good deal of practice in this part of our business, we have paid particular attention to it. We have appropriated Plate 15 to prove geometrically that the size and beauty of cornices do not so much depend on their height as on their projections; but as that and the sizes are treated in their places, we shall here only make a few remarks on their constructions.

"The projection of a cornice ought to be, at least, one-fourth more than its rise; the parts should be as few as possible and those well proportioned; not crowd in any mouldings that cannot be seen. About one-half the projections ought to be given to the plancere, which will prevent its looking bulky and give it a light appearance. Their fillets ought not to be too small, and to have a good projection before each moulding; at least as much as they rise. Their quirks ought to be large and as many as the cornice will admit of, as the principal beauty of plain cornices depends on the shadows of their quirks. When mouldings are ornamented they may be larger than when plain, as carving lightens them. They ought never to be too much crowded with ornaments, but always leave a sufficiency of plain space to form a contrast. Three embellishments are generally sufficient for any cornice, and one ought always to be in the plancere. Stucco cornices admit of much greater variety than wooden ones, but nearly the same rules apply to both.

"Observe that the ornaments be bold and proportioned to the height of the room, not to make the same mouldings serve for a room of twenty feet high that was modeled for one of ten; and that they always be such as will appear natural and open. In some cases where the room is low, the plancere may be laid flat on the ceiling, or even sunk level with it. Their projection may in some cases be double their height, and the height, when enriched with three ornaments, about a thirtieth part of the height of the room. Their projection ought in some measure to be conformable to the size as well as their height to that of the room. This will admit of no exact rule; therefore must, in a great measure, depend on the fancy of the designer."

To the historian, the *New System of Architecture* gives an added authority to his attempts at distinguishing the early nineteenth century work from the earlier, strictly Colonial article, and to his efforts to trace the changes in the general character of American detail from the strong, robust Georgian work to the refined and attenuated proportion of that produced in the early years of the following century. The great value of the books in the draughting-room as a part of the architect's working library need hardly be dwelt upon.

While the later books, *The Rudiments of Architecture* (Boston, 1814), *The Practical House Carpenter* (Boston, 1832), and the *Practice of Architecture* (Boston, 1833), also contain much that is of value and interest, they show (most unfortunately it seems at the present time) a pronounced Greek feeling, and little space is given in the reprint to the later books in comparison with that devoted to those carrying examples of the period immediately preceding the Greek Revival.

That the books of Asher Benjamin were used extensively by the "carpenter architects" of the beginning of the nineteenth century is evident. In his introductory text, Mr. Embury calls attention to a number of examples of work which were either designed by Benjamin or, more probably, copied from designs in his books. Of these he mentions the First Congregational Church at Bennington, Vermont, built in 1806, which is evidently reproduced from Plate 33 of the *Country Builder's Assistant,* and the First Parish Church of Bedford, Mass., which is an almost exact copy of Plate 39 in the *American Builder's Companion.*

"I have found several other churches still extant and some which have been destroyed," he adds, "which were copied from various plates published in the Asher Benjamin books; and while I have found fewer country houses which were obviously taken from his illustration, I am inclined to believe that much more work was exactly executed after his designs

than I know about, principally because country houses lack the outstanding character of church buildings and are not so readily recognized."

It is difficult to determine the exact effect of his designs upon the detail of the late Colonial work, and almost equally impossible to decide how much of the detail illustrated was of his own design, and how many of the drawings were of things he had seen. Mr. Embury found, for example, that the upper left-hand cornice of Plate 12 in the *American Builder's Companion* was in common use at Litchfield, Connecticut, before the publication of this book, but he says: "Until I saw it actually built, I had assumed that the design was original with Benjamin."

Though our knowledge of the life of Asher Benjamin is no greater than that which we possess in the case of many other early designers, we seem able to follow his development almost year by year from his designs and comments and ideas as contained in his various books.

The available information relating to his life is, however, astonishingly small, and it seems unfortunate that Mr. Embury did not take advantage of the opportunity offered in reprinting his work to give us some details of the man. Histories of Boston, where he lived during the greater part of his life, seem to be entirely devoid of any real information, and the *Memorial History of Boston* does not contain the time of his birth or death. Neither is the name of Asher Benjamin to be found in the various Benjamin genealogies, and it is evident from the records that he was not born in Boston. The marriage records of Boston show that he was married there on July 24, 1805, to Nancy Bryant of Springfield. This particular Nancy fails to appear in Bryant family histories.

Though Benjamin was married in 1805, his name does not appear in Boston directories until five years later, when we find him as an architect at No. 4 Charles street. His two most eminent contemporaries, Charles Bulfinch and Peter Banner, appear much earlier. Bulfinch, as "gentleman" and later as "Superintendent of Police," appears in the first Boston directory, which was issued in 1789; and Banner, as "architect, 29 Orange street," is first listed in 1806.

Benjamin did not continue as an architect. From 1813 to 1820 he had, in addition to his office on Charles street, a paint store at No. 55 Broad street. The architectural listing was dropped in 1816, and he appeared only as the proprietor of the paint store. His name is not in the directories from 1825 to 1827, but in the issue of 1828, and from that until the one for 1845, his name is entered regularly as architect.

Benjamin seems to have been a successful architect as well as writer on architectural subjects and, to quote from Mr. Embury's introduction, "his executed buildings are emphatic though mute testimony to the correctness of his theories, to the delicacy of his detail and to the soundness of his design, while the fascinating series of drawings with which he illustrates his books are of the utmost practical benefit to the architect or draughtsman today. He was not only sound, technically, but, as will be seen from the extracts from his work which are interspersed among the illustrations of this volume, a man of acute artistic perception and sound common sense, and the principles which he expounds might well become maxims for the guidance of our architects at the present time."

BOOKS ON COLONIAL ARCHITECTURE

By RICHARD F. BACH

Curator, School of Architecture, Columbia University

Part VI.—Articles in the Periodicals—(Continued)

THE following list is a continuation, from the July issue, of the bibliography of the more interesting or otherwise notable articles that have appeared in periodicals.* Caption "a," under the sub-head of Domestic Architecture, was concerned with New England dwellings. Caption "b," beginning the present list, takes up dwellings in the Middle States:

4. DOMESTIC ARCHITECTURE (continued).

b. Dwellings in the Middle States.

Betts, Benj. F. Early Architecture of Western New York, in *Architecture,* vol. 33, nos. 1-6; January-June 1916; and vol. 34, nos. 1-5; July-November 1916; pl. 2, 3, 17, 18, 40, 41, 57, 58, 74, 75, 89, 90, 116, 117, 131, 132, 146, 147, 161, 162, 176, 177, 179, 180, all measured drawings; and text vol. 33, no. 1; pp. 1-3.

Betts, Benj. F. Early Architecture in Western New York, in *The Architectural Record,* vol. 33, no. 1; Jan. 1916; pp. 1-3, ill.

Black, William Nelson. Colonial Building in New Jersey, in *The Architectural Record,* vol. 3, no. 3; Jan. 1894; pp. 245-262, ill. 8 col. pl.

Boyd, John T., Jr. Some Early Dutch Farmhouses in New Jersey, in *The Architectural Record,* three parts, (1) vol. 36, no. 1; July 1914; pp. 31-48, ill. (2) vol. 36, no. 2; August 1914; pp. 148-158, ill. (3) vol. 36, no. 3; Sept. 1914; pp. 220-230, ill.

Bragdon, Claude F. Colonial Work of the Genesee Valley, in *The American Architect and Building News,* in three parts, (1) vol. 43, no. 952; March 24, 1894; pp. 141-142, ill. (2) vol. 45, no. 969; July 21, 1894; pp. 26-27, ill. (3) vol. 46, no. 981; Oct. 13, 1894; pp. 11-12, ill.

Bragdon, Claude F. Colonial Work at Sackett's Harbor, in *The American Architect and Building News,* vol. 34, no. 823; Oct. 3, 1891; pp. 9-10, ill.

Coleman, Oliver. Dutch Byways in New Jersey, in *House and Garden,* vol. 8, no. 1; July 1905; pp. 1-8, ill.

De Kay, Charles. Old Houses in Jefferson County, in *The Architectural Record,* vol. 20, no. 2; Aug. 1916; pp. 103-115, ill.

Eberlein, Harold Donaldson. Colonial Seats in Fairmount Park, Philadelphia, in *American Homes and Gardens,* vol. 12, no. 8; Aug. 1915; pp. 254-260, ill. Photographs by T. C. Turner.

Embury, Aymar. Three Old Dutch Roads and the Houses Along Them, in *Country Life in America,* vol. 14, no. 6; Oct. 1909; pp. 591, 594, 656, 658, 660, 662, ill.

Embury, Aymar. Pennsylvania Farmhouses, Examples of Rural Dwellings of a Hundred Years Ago, in *The Architectural Record,* vol. 30, no. 5; Nov. 1911; pp. 475-485, ill.

Embury, Aymar. The Dutch Colonial Type of House, in *House and Garden,* vol. 17, No. 2; Feb. 1910; pp. 46-49, ill.

Fanning, Ralph S. Some Post Colonial Remains on Long Island, in *The American Architect,* vol. 110, no. 2138; Dec. 13, 1916; pp. 367-371, ill.

Frey, S. L. An Old Mohawk Valley House, in *The Magazine of American History,* vol. 8, no. 4; May 1882; pp. 337-345.

Gillespie, Harriet Sisson. A Typical Old Dutch Farmhouse, in *American Homes and Gardens,* vol. 12, no. 3; March 1915; pp. 76-80, ill., photos by J. C. Turner.

Gillespie, Harriet S. Historic Dutch Houses upon Staten Island, in *Country Life in America,* vol. 31, no. 6; April 1917; pp. 74-75, ill.

Gillespie, Harriet Sisson. The John Howard Payne Homestead, (Easthampton, Long Island) in *Country Life in America,* vol. 26, no. 6; October, 1914; pp. 69-72, ill.

Hindermyer, Gilbert. Wyck, an Old House and Garden at Germantown, Phila., in *House and Garden,* vol. 2, no. 11; Nov., 1902; pp. 545-559, ill.

Lamb, Mrs. Martha J. The Van Rensselaer Manor, in *The Magazine of American History,* vol. 11, no. 1; January, 1884; pp. 1-32, ill.

Lamb, Mrs. Martha J. The House of Elias Boudinot and Governor Livingston, in *The Magazine of American History,* vol. 21, no. 5; May, 1889; pp. 361-380, ill.

Lamb, Mrs. Martha J. The Golden Age of Colonial New York, in *The Magazine of American History,* vol. 24, no. 1; July, 1890; pp. 1-30, ill.

Lamb, Mrs. Martha J. Historic Houses and Landmarks, in *The Magazine of American History,* three parts, (1) vol. 21, no. 1; Jan., 1889; pp. 1-23, ill. (2) vol. 21, no. 3; March, 1889; pp. 178-207, ill. (3) vol. 22, no. 3; March, 1889; pp. 177-207, ill.

Mappa House, The, Trenton, N. J., in *The American Architect,* vol. 104, no. 1964; Aug. 13, 1913; pp. 61-68, ill., 12 pl.

*See also prefatory notes in this place in *The Architectural Record* for July, 1917.

Maxwell, Perriton. Sunnyside, a Home and a Shrine, in *American Homes and Gardens,* vol. 5, no. 10; October, 1908; pp. 396-399, ill., photos. by Arthur Hewitt.

Newlin, Lilian Washburn. An Old Homestead, in *The House Beautiful,* vol. 36, no. 3; Aug., 1914; pp. 73-76, ill.

Pearman, Joseph Bernard. An Old Homestead of Colonial New Jersey, in *American Homes and Gardens,* vol. 10, no. 8; August, 1913; pp. 267-270, 300, ill. Photos by T. C. Turner.

Reynolds, Marcus. The Colonial Buildings of Rensselaerwyck, in *The Architectural Record,* vol. 4, no. 4; April-June, 1894-1895; pp. 415-438, ill., 4 pl.

Rogers, Mrs. Henry Wade. Dutch Colonial Farmhouses, in *The House Beautiful,* vol. 16, no. 5; Oct., 1904; pp. 15-17, ill.

Shafer, Carl Schurz. A Landmark on the Hudson (Lansing House) in *American Homes and Gardens,* vol. 12, no. 1; Jan., 1915; p. 15, ill.

Slocum, S. E. Early Dutch Colonial Architecture, in *The American Architect and Building News,* vol. 105, no. 1985; Jan. 7, 1914; pp. 1-10, 12, ill.

Smith, Wilson Carey. The Miller House; Washington's Headquarters at White Plains, in *The Magazine of American History,* vol. 7, no. 2; Aug., 1881; pp. 108-118, ill.

Some Suburbs of New York, in *Lippincott's Magazine,* in two parts, (1) New Jersey, new series, vol. 8, July, 1884; pp. 9-23, ill. (2) Westchester and Long Island, Aug., 1884; pp. 113-126, ill.

Stapley, Mildred. The Last Dutch Farmhouses in New York City, in *The Architectural Record,* vol. 32, no. 1; July, 1912; pp. 23-36, ill., photos, by Arthur G. Byne.

c. Dwellings in the Southern States.

Baldwin, Frank Conger. Early Architecture of the Rappahannock Valley, in *The Journal of the American Institute of Architects,* four parts. (1) Kenmore, vol. 3, no. 3; March, 1915; pp. 113-118, ill. (2) Cleve Manor, vol. 3, no. 6; June, 1915; pp. 234-240, ill. (3) Gay Mont and Belle Grove, vol. 3, no. 8; Aug., 1915; pp. 328-336, ill. (4) Marmion, vol. 4, no. 3; March, 1916; pp. 87-95, ill.

Bibb, A. B. Old Colonial Work of Virginia and Maryland, in *The American Architect and Building News,* seven parts, (1) vol. 25, no. 703; June 15, 1889, pp. 279-281, ill. (2) vol. 25, no. 705; June 29, 1889; pp. 303-305, ill. (3) vol. 26, no. 712; Aug. 17, 1889; pp. 71-73, ill. (4) vol. 26, no. 716; Sept. 14, 1889; pp. 123-124, ill. (5) vol. 26, no. 719; Oct. 5, 1889; pp. 161-163, ill. (6) vol. 31, no. 805; May 30, 1891; pp. 133-135, ill. (7) vol. 34, no. 831; Nov. 28, 1891; pp. 130-132, ill.

Brooke, Arthur. A Colonial Mansion of Virginia, in *The Architectural Review,* vol. 1, no. 8; Aug., 1899; pp. 91-94, ill.

Brown, Glenn. Old Colonial Works in Virginia and Maryland, in *The American Architect and Building News,* three parts. (1) vol. 22, no. 617; Oct. 22, 1887; pp. 198-199, ill. (2) vol. 22, no. 621; Nov. 19, 1887; pp. 242-243, ill. (3) vol. 22, no. 622, Nov. 26, 1887; pp. 254, pp. 5, ill.

Coleman, Charles Washington. The Wythe House, Williamsburg, Virginia, in *The Magazine of American History,* vol. 7, no. 4; Oct., 1881; pp. 270-275, ill.

Dabney, Edith. Historic Mansions of the Rappahannock River; Sabine Hall, one of the famous Carter Homestead in Virginia, in *American Homes and Gardens,* vol. 6, no. 5; May, 1909; pp. 197-200, ill.

Greenleaf, Margaret. Castle Hill, Virginia, in *Country Life in America,* vol. 26, no. 6; Oct., 1914; pp. 41-43, ill.

Hammond, John Martin. Homewood, Baltimore, Md., in *The Architectural Record,* 2 parts: (1) vol. 41, no. 5; May, 1917; pp. 435-447; (2) vol. 41, no. 6; June, 1917; pp. 525-535, ill., photos by author and measured drawings by Joseph V. Phelan.

Horton, Mrs. Thaddeus. Classic Houses of the South, Old and New, in *The House Beautiful,* vol. 12, no. 2; July, 1902; pp. 84-90, ill.

Horton, Mrs. Thaddeus. The Colonial Houses of the South, in *Country Life in America,* vol. 12, no. 6; Oct., 1907; pp. 639-644, ill., photos by Henry Troth, Herbert E. Angell and others.

Horton, Corinne. Georgian Houses of the Far South, in *House and Garden,* vol. 6, no. 6; Dec., 1904; pp. 260-267, ill.

Horton, Corinne. Old Charleston Gateways, in *House and Garden,* vol. 8, no. 5; Dec., 1905; pp. 245-250, ill.

Keisten, J. L.; Munson, O. J.; Weher, J. A. Early Architecture of Virginia, in *Architecture,* vol. 34, no. 6; Dec., 1916; pp. 262-264, 266, measured drawings.

Kennedy, J. Robie, Jr. Examples of Georgian Work in Charleston, South Carolina, in *The Architectural Record,* vol. 19, no. 4; April, 1906; pp. 283-294, ill.

Lamb, Mrs. Martha J. Oak Hill, the House of President Monroe, in *The Magazine of American History,* vol. 21, no. 5; May, 1889; pp. 381-385, ill.

Miller, Wilhelm. Mount Vernon as Washington Would Have Had It, in *Country Life in America.* 4 parts. (1) Washington's Taste in Walls and Brickwork, vol. 26, no. 2; June, 1914; pp. 49-52, ill. (2) Washington's Taste in Landscape Gardening, vol. 26, no. 3; July, 1914; pp. 48-49, 80, 82, ill. (3) Restore George Washington's Vistas, vol. 26, no. 4; Aug., 1914; pp. 43-45, 82, 84, ill. (4) Washington's Taste in Gardens and Flowers, vol. 26, no. 6; Oct., 1914; pp. 58-59, ill.

Randall, Henry T. Colonial Annapolis, in *The Architectural Record*, vol. 1, no. 3; March, 1892; pp. 309-345.

Ronim, E. E. Colonial Homes of Natchez, in *House and Garden*, vol. 11, no. 2; Feb., 1907; pp. 59-64, ill.

Smalley, E. V. The White House, in *Century Magazine*, vol. 27, no. 6; April, 1884; pp. 803-815, ill.

Stapley, Mildred. The House of George Washington, in *Country Life in America*, vol. 26, no. 1; May, 1914; pp. 39-44, ill.

Westover Restored, in *Country Life in America*, vol. 30, no. 4; Aug., 1916; pp. 25-27, ill. Photos by Leo Bock.

Willey, Day Allen. Westover, in *House and Garden*, vol. 11, no. 6; June, 1907; pp. 231-235, ill.

Wilstach, Paul. The Country Home of George Washington, in *Country Life in America*, vol. 29, no. 6; April, 1916; pp. 23-26, ill., plan.

5.—Architectural Details and Minor Arts.

a. Doors, Doorways, Mantels, Windows.

Buckler, Riggin. Colonial Doorways of Baltimore, Maryland, in *The Brickbuilder*, vol. 23, no. 6; June, 1914; pp. 140-143, ill.

Byne, Arthur G. Some Century-Old Doorways in Rural New England, in *The Architectural Record*, vol. 30, no. 6; Dec., 1911; pp. 575-583.

Cousins, Frank. Mantel Details, Some of the Early Craftsman's Work in Salem, Danversport and Peabody, Massachusetts, and in Portsmouth, New Hampshire, in *Country Life in America*, vol. 30, no. 1; May, 1916; pp. 46-47, photos.

Cousins, Frank. Stairways of Old New England, in *Country Life in America*, vol. 26, no. 6; Oct., 1914; pp. 66-67, ill.

The Doorway Inside the Colonial House, in *Country Life in America*, vol. 31, no. 2; Dec., 1916; pp. 34-35, ill.

Embury, Aymar. The Beauty of Colonial Doorways, in *Country Life in America*, vol. 18, no. 6; Oct., 1910; pp. 647-650, ill., photos by Mary H. Northend, Henry Troth, A. B. Phelan, Frank Cousins, Herbert E. Angell and others.

Holtzoper, E. C. Doors and Doorways, in *Country Life in America*, vol. 6, no. 2; June, 1904; pp. 135-139, ill.

Northend, Mary Harrod. A Group of Colonial Doorways, in *American Homes and Gardens*, vol. 12, no. 2; Feb., 1915; pp. 52-55, ill.

Riley, Phil M., and Cousins, Frank. Windows of Old Salem, in *Country Life in America*, vol. 28, no. 6; Oct., 1915; pp. 48-49, ill.

Robb, Gordon, Dyer, M. A., and others. Early American Architectural Details, no text, photographs and measured drawings, pl. 1-39 to date, in *The Brickbuilder*, vol. 24, no. 12; Jan.-Dec., 1915; pl. 1-12., vol. 25, no. 12; Jan.-Dec., 1916; pl. 13-35. Continued in *The Architectural Forum*, vol. 26, no. 1; to date; Jan. to date, pl. 37-39. Still in course of publication.

b. Fences, Brickwork, etc.

Boston Brickwork, Colonial Era, in *The Brickbuilder*, vol. 14, no. 2; Feb., 1905; pp. 27-33, ill.

Kilham, Walter H. Colonial Brickwork of New England, in *The Brickbuilder*, three parts, (1) vol. 10, no. 12; Dec., 1901; pp. 244-248, ill. (2) vol. 11, no. 1; Jan., 1902; pp. 3-6, ill. (3) vol. 11, no. 2; Feb., 1902; pp. 25-28, ill.

Kilham, Walter H. Colonial Gateways and Fences in New England, in *House and Garden*, vol. 7, no. 4; April, 1905; pp. 225-232, ill.

Litchfield, Electus D. Colonial Fences, in *Country Life in America*, vol. 31, no. 5; Mar., 1917; pp. 61-64, ill., photos by Mary H. Northend, Frank Cousins, and others.

Northend, Mary Harrod. Old Fences in Salem and Newburyport, in *American Homes and Gardens*, vol. 11, no. 2; Feb., 1914; pp. 48-52, ill., photos by the author.

c. Metal Work.

Cousins, Frank. Footscrapers of a Bygone Day, in *Country Life in America*, vol. 24, no. 6; Oct., 1913; pp. 58, ill.

Eberlein, Harold Donaldson. Decorative Cast Iron in Colonial America, in *Arts and Decoration*, vol, 6, no. 10; Aug., 1914; pp. 374-377, ill.

Hunter, Walker C. Various Types of Old Colonial Knockers, Found on Houses in New England, in *The House Beautiful*, vol. 39, no. 5; April, 1916; pp. 12, ill.

Northend, Mary Harrod. Old Time Latches and Knockers, in *American Homes and Gardens*, vol. 5, no. 12; Dec., 1908; pp. 466-468, ill.

d. Furniture, Wallpaper, Silver, Pottery, etc.

Cave, Roger. Paul Revere, Silversmith, and Modern Emulators. The Handwrought Silverwork of Robert Jarvie, Craftsman, in *Arts and Decoration*, vol. 4, no. 10; Aug., 1914; pp. 385-386, ill .

Comstock, Elizabeth M. Early American Spoons, in *The House Beautiful*, vol. 32, no. 3; Aug., 1912; pp. 78-79, ill.

Dyer, Walter A. Baron Stiegel and His Glassware, in *The House Beautiful*, vol. 37, no. 1; Dec., 1914; pp. 24-28, ill.

Dyer, Walter A. Colonial Clock Makers, in *The House Beautiful*, vol. 37, no. 2; Jan., 1915; pp. 55-58, ill.

Dyer, Walter A. Duncan Phyfe Furniture, in *The House Beautiful*, vol. 37, no. 4; March, 1915; pp. 120-125, ill.

Dyer, Walter A. Early American Silver, in *Arts and Decoration*, vol. 7, no. 7; May, 1917; pp. 365-367, 380, ill.

Eberlein, Harold Donaldson. Baron Stiegel and His Manheim Glass, being an account of the manufacture of flint glass

in the eighteenth century in Pennsylvania, in *Arts and Decoration,* vol. 4, no. 7; May, 1914; pp. 273-275, ill.

Eberlein, Harold Donaldson, and McClure, Abbot. Duncan Phyfe and American Empire Furniture, in *Good Furniture,* vol. 4, no. 3; Dec., 1914; pp. 123-127, ill.

Eberlein, Harold Donaldson. Early American Decorative Needlecraft, in *Arts and Decoration,* vol. 5, no. 2; Dec., 1914; pp. 53-55, ill.

Eberlein, Harold Donaldson. Early American Decorative Painting, in *Arts and Decoration,* vol. 5, no. 6; April, 1915; pp. 224-226, ill.

Eberlein, Harold Donaldson. Early American Pewter, illustrated by examples from the Pennsylvania Museum and School of Industrial Art, in *Arts and Decoration,* vol. 5, no. 4; Feb., 1915; pp. 139-141, ill.

Eberlein, Harold Donaldson. Early American Silver, illustrated by specimens from the Pennsylvania Museum of Industrial Arts, in *Arts and Decoration,* vol. 4, no. 12; Oct., 1914; pp. 452-455, ill.

Eberlein, Harold Donaldson. Early Decorative Weaving in America, in *Arts and Decoration,* vol. 4, no. 11; Sept., 1914; pp. 414-417, ill.

Eberlein, Harold Donaldson. Furniture Painting in Colonial America, a decorative process practiced from New England to Pennsylvania, in *Arts and Decoration,* vol. 4, no. 8; June, 1914; pp. 347-349, ill.

Eberlein, Harold Donaldson. Pen and Brush Illuminations of the Pennsylvania Germans, illustrated by examples taken from the collection of the Pennsylvania Historical Society, in *Arts and Decoration,* vol. 4, no. 8; June, 1914; pp. 315-317, 327, ill.

Eberlein, Harold Donaldson. The Decorated Pottery of the Pennsylvania Dutch, in *Arts and Decoration,* vol. 4, no. 3; Jan., 1914; pp. 109-112, ill.

Eberlein, Harold Donaldson. The Making of Early American Glass, in *Arts and Decoration,* vol. 4, no. 4; Feb., 1914; pp. 154-156, ill.

Fegley, H. Winslow. Historic Stove Plates, in *House Beautiful,* vol. 37, no. 4; March, 1915; pp. 128-129, ill.

Hunter, George Leland. The American Colonial Styles, illustrated by Colonial Furniture in the Metropolitan Museum, in *Arts and Decoration,* vol. 4; no. 12; Oct., 1914; pp. 443-445, ill.

Lockwood, Luke Vincent, Old American Silver, in *Country Life in America,* 5 parts, (1) vol. 25, no. 2; Dec., 1913; pp. 69-72, ill. (2) vol. 25, no. 4; Feb., 1914; pp. 55-57, ill. (3) vol. 25, no. 6; April, 1914; pp. 54-55, ill. (4) vol. 26, no. 2; June, 1914; pp. 57-59, ill. (5) vol. 27, no. 3; Jan., 1915; pp. 55-70, 72, ill. Photos by Arthur G. Eldredge.

Marshall, James Collier. Duncan Phyfe, American Cabinet Maker, in *Country Life in America,* vol. 27, no. 6; April, 1915; pp. 48-50, ill.

Mercer, Henry C. Pottery of the Pennsylvania Germans, in *The Pennsylvania German,* vol. 2, 1901; pp. 86-88, ill.

Northend, Mary Harrod. Old Time Wall Papers, in *American Homes and Gardens,* vol. 2, no. 6; June, 1906; pp. 403-405, ill.

Riley, Phil, and Cousins, Frank. Landscape Wall Paper, Famous Old Wall Papers in Famous Old Houses, in *The House Beautiful,* vol. 39, no. 5; April, 1916; pp. 148-149 and pp. xxxviii-xli, ill.

Robie, Virginia. Colonial Furniture, in *The House Beautiful,* vol. 12, no. 5; Oct., 1902; pp. 262-280, ill.

Sanborn, Kate. Old Time Wall Papers and Decorations, in *The House Beautiful,* vol. 12, no. 5; Oct., 1902; pp. 304-308, ill.

6.—Biographical.

Bennett, Wells. Stephen Hallett and His Designs for the National Capitol, 1791-1794, in *The Journal of The American Institute of Architects,* 4 parts, (1) vol. 4, no. 7; July, 1916; pp. 290-295, ill.; (2) vol. 4, no. 8; Aug., 1916; pp. 324-330, ill.; (3) vol. 4, no. 9; Sept., 1916; pp. 376-383, ill.; (4) vol. 4, no. 10; Oct., 1916; pp. 411-418, ill.

Brendle, Abraham S. Henry William Stiegel, in *Lebanon County Historical Society's papers and addresses,* vol. 6, no. 3; Aug., 1912; pp. 55-76; ill.

Brown, Glenn. Dr. William Thornton, Architect, in *The Architectural Record,* vol. 6, no. 1; July, 1896; pp. 52-70, ill.

Charles Bulfinch, Architect, in *The Brochure Series of Architectural Illustrations,* vol. 9, no. 6; June, 1903; pp. 123-133, ill.

Dyer, Walter A. Samuel McIntire, Master Carpenter, in *The House Beautiful,* vol. 37, no. 3; Feb., 1915; pp. 65-69, ill.

Howells, John Mead. Charles Bulfinch, Architect, in *The American Architect and Building News,* vol. 103, no. 1695; June 17, 1908; pp. 195-200, ill.

Hart, Charles Henry. Peter Harrison, Architect, in *Proceedings of Massachusetts Historical Society,* March, 1916; pp. 261-268.

Kimball, Sidney Fiske. Thomas Jefferson as Architect, Monticello and Shadwell, in *The Harvard Architectural Quarterly,* vol. 2, no. 4; June, 1914; pp. 89-137, ill.

Kimball, Sidney Fiske. Thomas Jefferson and the Origin of the Classic Renaissance in America, in *Art and Archaeology,* vol. 1, no. 6; May, 1915; pp. 219-227, ill.

Owen, Frederick D. The First Government Architect, James Hoban, of Charleston, S. C., in *The Architectural Record,* vol. 11, no. 2; Oct. 1901; pp. 581-589.

Sieling, J. H. Baron Henry William Stiegel, in *Lancaster County Historical Society's papers,* vol. 1, 1897; pp. 44 65.

Stapley, Mildred. Thomas Jefferson, Architect, in *The Architectural Record,* vol. 29, no. 2; Jan., 1911; pp. 178-185.

Willard Ashton R. Charles Bulfinch the Architect, in *New England Magazine,* vol. 3 no. 3; new series Nov. 1890; pp. 273-299, ill.



Mr. Cram's Brilliant But Unconvincing Scammon Lectures.

To Mr. Cram, fellow of the American Institute of Architects, and corresponding member of the Royal Institute of British Architects, teacher, author, lecturer and practitioner, who has raised Gothic architecture from the slough of Victorianism, we delight to pay honor. The temptation to regard his utterances as coming *ex cathedra* is irresistible to the layman and is rarely combated by the architect. Therefore the two lectures in Gothic architecture given by Mr. Cram at the Art Institute of Chicago in the spring of 1915 may expect a cordial reception from the laity and profession.

These, and the papers by Mr. Thomas Hastings and Mr. Claude Bragdon which together with Mr. Cram's comprised the Institute's lecture course for that year on the Scammon Foundation, have now been offered to the larger public in a volume entitled, "Six Lectures on Architecture" (reviewed in the Architectural Record for April).

The literary art of these lectures by Mr. Cram inevitably kindles the admiration of the reader; nevertheless they do not in all minds leave the comfortable afterglow of conviction.

At the outset Mr. Cram declares: "Like men, it (architecture) is possessed of spirit, and the combination of these two elements (spirit and organism) gives it an actual life and places it in the category of the creatures that exist by the will and at the hand of God." To believe that a Gothic cathedral is a living thing, to believe that every German shell that rends the soaring vaults of Rheims causes unutterable anguish in that mighty fabric, is the thought of a poet and a true lover of architecture. Perhaps Wordsworth experienced a kindred sentiment when he exclaimed, "Dear God, the very houses seem asleep, and all that mighty heart is lying still." But if we materialists must sadly remain unconvinced that the cathedral contains spirit and life, we cannot deny that it is something other than an inert mass.

The great vaults, 150 feet on high, have been locked in deadly conflict with the giant buttresses which leaped to meet them 700 years ago. This struggle so analogous to that of the human spirit that cries out *"Je sens deux hommes en moi"* is what moves us in the contemplation of Nôtre Dame, Amiens and Rheims. This is the appeal; not that of sacramental religion and ecclesiastical philosophy which Mr. Cram would have us believe are identical with medieval art. That St. Thomas Aquinas or Hugh of St. Victor exert the same kind of appeal as a medieval cathedral or any appeal whatsoever in this day and generation, I certainly deny.

An attempt to institute a Tractarian movement in architecture or to discover in transient and sacerdotal ceremonial the strength of architecture is the blind spot in Mr. Cram's vision.

Going back to the basilican and domical prototypes of Rome, the development of medieval architecture is brilliantly traced through Syria and Byzantium, back to Italy and the Lombards, with passing reference to Venice, which he calls a splendid anachronism. The credit of discovering the ribbed vault he gives to the Lombards and not to the Cluniac monks, although he admits "the present weight of evidence points to Normandy or even Durham" as its birthplace.

It is a pleasure to see further on that Mr. Cram believes that the pointed arch, ignored by the modern critic, has really something to do with the Gothic style, although he denies that it was called into being by the difficulty of vaulting oblong bays. This problem, he says, was solved

by the use of stilted arches, resulting in those waved surfaces which, he says, "were a joy to their architects," and, we can confidently add, a bane to their builders. We could wish that he had wielded the cudgels even more vigorously for the pointed arch, for he mentions the Abbaye aux Dames, a church which no critic would call Gothic, yet which has ribbed vaults, clustered piers, flying buttresses, clearstory triforium, and oblong bays, a complete Gothic organism, except for the insignificant detail that its arches are round and not pointed.

The very simple and natural process of reasoning adduced for the use of the pointed arch—namely, that the builders thought it beautiful and found it useful—Mr. Cram deserts in his extremely complicated explanation of the *raison d' être* of the chevet. The apse in one form or another was in common use from the age of Augustus, who employed it in the Temple of Mars Ultor. Why not believe that it was first used as a simple termination of the central aisle of the choir? To carry the side aisles around the apse as an ambulatory, instead of ending them against blank walls, is so obvious a device that one needn't make a pilgrimage to Syria or Ravenna to discover it. Given an ambulatory, relic worship in the twelfth century called for chapels and the chapels were built out from the sides of the ambulatory to be in the sacred precincts of the chancel, *voila* the chevet!

Where other chapels were required, they were built on the sides of the transepts, choir and nave, as at Canterbury, Paris, and elsewhere, obviously as necessary additions to the church, without any primal purpose of beauty; in fact, the choir chapels of Nôtre Dame, in Paris, detract seriously from its external appearance.

Mr. Cram would have us believe that the chevet was a sort of dream or ideal of beauty ever before the eyes of those ascetic and violent protagonists of the different cults of the early church in the near east. The simple apse from the basilica, he says, they had to double to make a round church; had they never heard of the Pantheon? To this circle they added little niches and surrounded the whole with an aisle with clearstory above; cut this in half again, introduce a square and incidentally a dome on pendentives, and we have St. Sophia; or cut it in half and add it to the choir of a Gothic cathedral, and we have a chevet!

Necessity is especially the mother of architectural invention, and with relics and worshipers clamoring to be housed, there was little time for the medieval architect to make archeological investigations of the plans of Bosrah, St. Sophia or even St. Vitale.

It is extremely interesting to pick out of Mr. Cram's lectures his comparative estimate of the great cathedrals of France—Nôtre Dame, Chartres, Amiens and Rheims. The comparative beauty of these mighty sisters has been a mooted subject for six hundred years, ever since the monkish rhapsodist cried out for a super cathedral with the portals of Rheims, the towers of Nôtre Dame, the nave of Amiens and the glass of Chartres. Of Nôtre Dame he says, "the façade is the most superbly conceived work of architecture that has ever issued from the hand of man in any place or any time"; of the interior of Chartres, "the most perfectly religious interior man has produced"; of Bourges, not generally placed in the first rank, "it is the most inspiring and romantic of all, and in some respects is the most brilliant in its artistic invention"; of Rheims, "first in mind and heart as the perfect work of man when he wrought in the fear of God."

A large part of his lectures is devoted to an attempt to prove that "the three centuries from 1000 A. D. to 1300 A. D. were probably the most wholesomely organized and the most sanely balanced and the most physically and spiritually stimulating that Christian Europe has known," at least so far as France, England, and Germany (omitting Prussia) are concerned. This follows his postulates that civilization is only as organic as the architecture which it produces, and that the art and architecture of these centuries is the greatest the world has seen. To come anywhere near proving the supremacy of the Middle Age, he is obliged to differentiate between culture and civilization, defining the first as made up of three elements, philosophy, religion, and art, and the latter as the degree to which a people has emerged from barbarism in motives, manners and customs. He frankly admits the deficiencies of the *moyen âge* in civilization and efficiency, but marshals the great names and great deeds of this truly great period to support his claim that it surpasses all other ages in culture.

But one can't help remembering that these same days saw the massacre of the Albigenses, famine and plague stalk through the land, the country in constant turmoil with feudal wars, the common people serfs,

and all but the priesthood and nobles poverty stricken and illiterate.

Mr. Cram gives us a list of great names of the eleventh, twelfth and thirteenth centuries, "corruscating like divine fireworks"; but we can hardly doubt that this list, replete with forgotten saints, bigoted priests, autocratic popes, medieval disputants and feudal brigands, could be overshadowed by a list of the emancipated minds of the sixteenth century or even the nineteenth.

It is a beautiful thought that philosophy, religion and art make the perfect cultural organism; but I am inclined to think that a "culture," or if need be a "civilization," founded on education, freedom of action, speech, and thought, and a control of the forces of nature, results in a happier, healthier and richer people; aye, and a more spiritual one!

The essay ends with an eloquent but unconvincing plea that in the spirit of medievalism we find the talisman that will lead to the overthrow of the Germans, and our victory in this "struggle between Corsica and Galilee." The central empires, he avers, represent the evil forces of the Renaissance-Reformation, the true opponents of civilization.

In the armies of the *Entente* he sees the recrudescent forces of medievalism representing the true culture and inspired by a faith not seeking any justification by works.

THOMAS E. TALLMADGE.

The Architectural League Food Battalion.

By the time this belated news item appears—a monthly publication is not the fleetest of news carriers—the Architectural League Food Battalion will probably have realized quite a bit of money for the Red Cross from the sale of early vegetables. The members of the battalion organized last spring to farm a tract of forty acres of land at Forest Hills, L. I., ten minutes from the station; and Mrs. W. K. Vanderbilt, Jr., promptly contributed a tractor to the war time venture.



The Architectural League Food Battalion is working in cooperation with the Mayor's Food Committee and the Agricultural Department of the Long Island Railroad.

Some three hundred draughtsmen and others are enlisted in the work, the larger architectural offices sending anywhere from ten to forty men. Each man donates a week of his vacation by giving a day at a time until he has given seven days' labor. In this way there is little disturbance of the office routine. The heads of the firms or others who for any reason cannot give their own time contribute the money necessary to carry on the operation, each subscription of $21 being considered the equivalent of one week's work.

The crops cultivated will be marketed under the direction of the Mayor's Food Committee and the proceeds given to the Red Cross.

The clever poster gotten out by the battalion and reproduced here was designed by Otto R. Eggers, of John Russell Pope's office, and D. P. Higgins, of the same office, is corresponding secretary for the battalion.

Architects Versus Landscape Architects As City Planners.

An interesting comparison is afforded in the May Architectural Record between the differing points of view of architect and of landscape architect in the architecture of city planning. The competitive plans for Dublin typify landscape ideas of informality

and use of greenswards and streets in all open spaces, even in the heart of the city; while the schemes for Manila and the smaller cities of the Philippines are excellent examples of geometrical arrangement and of open paved squares and crossing points as these are imagined by architects.

In such a comparison of two schools, we are bound to edge upon that perennial controversy of architect vs. landscape architect, though there is nothing to be regretted in so doing, for this particular dispute benefits rather than injures. Aside from the pleasure and excitement that argument often brings, in this case, each side checks the other from extremes of opinion and of execution. The landscape designers accuse their brother architects of forcing exuberant nature into a rigid, geometrical corset and of bringing monotony and lack of color and of interest into city plans. To this the architects reply that nature is often geometrical; that man is a part of nature and that his customs and his works, approved by time, are natural. They claim further that the landscape men have one formula of solution—trees, shrubs, flowers, grass, of one color, green—for most problems, that, in avoiding architectural elements they lose contrast of nature forms with artificial man-made forms, that landscape architects make of everything a park, whether it be a plaza or crossing point or street.

In general, architects have not gone to extremes, not so much because they were prudent as because lack of space and expense forbade, and individuals could not be brought to tie themselves down to, fixed heights of cornice and belt courses along city streets. The landscape school professes to feel that Haussmann's work in the Paris plan was overdone, that we are "getting beyond that sort of thing in this century." But it is a thankless task to decry Paris. Paris, with all her mathematics and sophistication of design, continues somehow to be the city the most charming, the most personal and the fullest of human interest on earth.

But it will not do to disparge this attempt to bring informal architecture into the planning of cities. The basis of these ideas of unsymmetrical balance, of unexpected vistas, is absolutely sound in general principles of art and goes back for its architectural foundation to the lovely dramatic beauty of medieval cities. There is no reason why such informal planning should not be used side by side with symmetrical elements, or else in a combination of the two, as American architects are doing so successfully in larger country houses. Indeed, so long as any prominent buildings in a city are laid out on symmetrical lines, with arcades and columned porticos, it follows inexorably that they will force their character on their immediate surroundings. To take an example, the stately balanced, mathematical lines of the new Post Office in New York, with its great base of parallel lines of entrance steps that mount up to the first story, resembling a vast sheaf—demand that any square or avenue in front of it have its design brought into the same harmonious scheme of lines and shapes. One would say that an entirely informal city plan could succeed only where all the important architecture of a city is informal, a condition which is hardly possible to obtain. The Dublin designs, other than the successful one, lean rather to the informal, and in the few spots where axial balance is found, it is too often half-developed, lacks spaciousness in conception and is weak in details. These plans seem formless and insipid beside the broad, sure handling and firm expert placing of details of the Philippine cities. Of course it must be understood that classic features—of horizontal lines of broad, flat walls, flat roofs, colonnades and arcades—are more native to the tropics than to north Europe where vertical elements and traditions of medieval informality are strong.

It should be said that the great minds of the landscape architect's profession have appreciated the value of a few classic elements in their design. Olmsted, the elder, planned the fine mall in Central Park, ending it in a great paved terrace on the lake in the manner of Versailles, and he planned it even more monumentally than others have since carried it out. In his admirable scheme for Franklin Park, Boston, he projected a similar feature, but the New England imagination, which has always had difficulty in grasping the place of mathematics in art, could not be persuaded to accept it. These classic, geometrical entrance ways into Olmsted's informal, naturalistic parks, were used not only for the value of contrast, but also in a definite place to provide a transition from the man-made city to nature. From this it is clear that Olmsted regarded a city as being in its nature a mechanism, an entity expressing in its architectural character much that is mathematical and geometrical.

JOHN TAYLOR BOYD, JR.



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SEPTEMBER 1917

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NIGHT ILLUMINATION—WISCONSIN STATE CAPITOL,
MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.

THE ARCHITECTVRAL RECORD

VOLVME XLII NVMBER III

SEPTEMBER, 1917

The WISCONSIN STATE CAPITOL MADISON, WISCONSIN

Geo. B. Post & Sons, Architects

By Michael A. Mikkelsen

MADISON, the capital of Wisconsin, lies in the charming Four-Lakes Country, in the south central part of the state, a region of gently rolling hills, winding rivers and silvery lakes. It is about eighty miles west of Milwaukee and about 130 miles northwest of Chicago. The four lakes from which the country takes its name are connected with one another and form the headwaters of the Rock River, flowing southward through Illinois into the Mississippi. The city occupies an isthmus between two of them, Mendota and Monona, bodies of water of great clearness and beauty, with bottoms of white sand and granite.

Madison is not without local prominence as a commercial and manufacturing focus for middle and southwestern Wisconsin. However, its inland position is dominated industrially by the lake ports of Milwaukee and Chicago; and it is important chiefly as the political and educational centre of the state. Its population of 25,500 (census of 1910) is in large part connected with or dependent upon the governmental and educational activities within its borders. The University of Wisconsin, situated there, has an assured position in the world of scholarship; the State Legislature is noted for its advanced social legislation, and the State Historical Society is among the foremost of its kind in America; while a numerous body of less widely known but flourishing institutions and societies indicate a general interest in art, science and public affairs. With a population not too large for the development of the community spirit, and rendered fairly

homogeneous by a numerous educated class, the city is typical of the alert, stimulating democratic culture of the West.

Like Washington, Madison is primarily a residential city, and, as in the case of Washington, it was laid out on virgin ground to serve as a capital. Its plan is so arranged as to give prominence to the capitol, which stands in a park of some fourteen acres at the summit of a hill, eighty-five feet high, in the centre of the town. Eight wide avenues, shaded with elm, oak and maple, converge upon the park, about which lies the principal business district, containing the Federal Building, the City Hall, the Public Library, the Opera House, and other notable public and private buildings. Directly west from the park, and within view of it, are the beautiful grounds of the University of Wisconsin, extending for a mile along the shore of Lake Mendota; in the opposite direction, on Lake Monona, is the picturesque reservation of the Monona Lake Assembly, a summer assembly on the Chautauqua model.

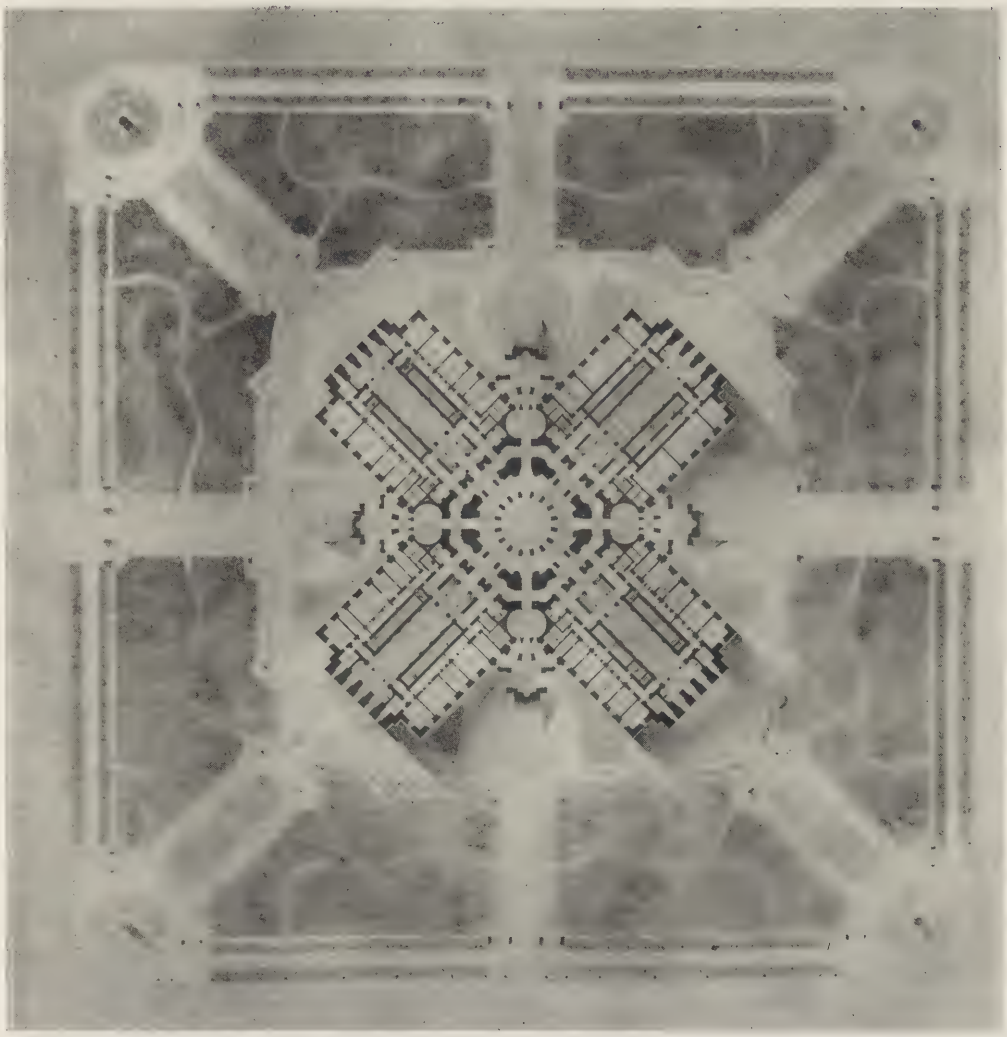
The older building which dominated the city from Capitol Park was partly destroyed by fire in 1904. A commission appointed by the Legislature invited five architectural firms of note to submit sketches for a new capitol, with the result that the scheme proposed by Geo. B. Post & Sons was accepted. As the legislature and other branches of the state government had to be housed in the old building on the site while the new one was in process of construction, the work on the latter has necessarily been extended over a long period; it was begun in 1907 and finished in 1917.

The new building is worthy of its exalted station. In some of its features it is undoubtedly the most beautiful public building in America. Sumptuous after the Roman Renaissance manner, yet of an economy of means toward opulent effects that meets every requirement of good taste, impressive without heaviness, in plan a daring and unusual solution of the architectural problem offered by the site, there is much about this monumental building which should appeal to the imagination of a community familiar with correct traditions as to the past but accustomed to rely upon its own resourcefulness as to the present.

The building stands on a formal terrace surrounded by a balustrade. It is cruciform in plan, with four equal wings extending toward the corners of the foursquare park and looking in the direction of the cardinal points of the compass.

The four wings, each 125 feet wide, 187 feet long and 85 feet high, terminate in porticoes composed of Corinthian columns supporting pediments. At each of the angles formed by the conjunction of the wings is a pavilion crowned with a flat dome. Each pavilion looks down one of the four avenues terminating at the sides of the park. On the axis of each of the avenues is a driveway leading to a porte-cochère under a grand staircase which ascends to the first story of the pavilion. The pavilions, which constitute the principal entrances, have vestibules giving on the rotunda. The portico of each of the wings looks down one of the four diagonal avenues terminating at the angles of the park. The porticoes form entrances for pedestrians only. There are, consequently, eight entrances, arranged in two groups of four each, those in each group being identical in treatment; and the building offers a finished appearance toward every quarter of approach.

Over the crossing of the wings rises a great dome, the crowning feature of the building. A podium wall above the small flat domes of the pavilions forms the base upon which the barrel of the great dome rests. The barrel is treated as a circular Corinthian arcade, through the arched windows of which the rotunda is lighted. The podium, ninety feet above the ground, is surrounded by a balustrade. At a height of 155 feet is a balustraded balcony resting on the colonnade of the barrel. Another balustraded balcony encircles the lantern at a height of 235 feet. On the lantern is mounted a gilded bronze statue symbolic of the spirit of Wisconsin. The figure



BLOCK PLAN—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.

bears on the crest of her helmet the emblem of the Badger State, the badger totem looking down from the lofty eminence of 300 feet.

The dome is of steel skeleton construction. Its framework is sheathed with terra-cotta and has a covering of granite, in blocks about eight inches thick. The supporting tower is a combination of steel skeleton and bearing-wall construction. The dome and its supporting tower form a structural unit independent of the wings. A valuable technical description of the structural steel engineering problems worked out with much ingenuity in the case of the dome is given in the Engineering News for August 28, 1913.

It may be of interest to note the means provided for the necessary periodic inspections of the dome and for the admission to it of sightseers. From the last landing of the elevators in the attic story of the wings interior stairways ascend to the level of the podium balcony. From the podium four spiral staircases, built in the thickness of the barrel of the dome, rise to the level of the balcony supported by the colonnade. From this level two inclined stairways lead up between the outer and inner shells of the dome to a point immediately below the crown. Here visitors may look through the eye of the coffer dome, thirty feet in diameter, into the great rotunda below. From the crown a single spiral staircase leads up into the lantern, with its exterior balcony and with an interior platform ten and a half feet in diameter.

The building is enriched with sculpture at salient points—in the tympanum of each of the pediments of the wings and on the podium wall over the flat domes of the pavilion entrances. Room has been reserved also for sculpture on the pavilion staircases and on the terrace balustrade.

The exterior, including the sculpture, is of white Bethel granite, the most durable of building stones, which simulates marble in purity of color and has a beautiful texture of its own.

After this brief inspection of the exterior one is prepared to form an opinion of the building, an opinion which, unfortunately, must be drawn exclusively from the illustrations published herewith.

It is somewhat difficult to reconcile oneself to the daring novelty of a plan in the form of a decussate cross for an American public building. It has, for example, the disadvantage of partly shutting off the dome when one approaches by the diagonal avenues. The composition of the picture in the photograph giving a front view of the west portico, it will be noted, is anything but happy. However, it must be admitted that it is perhaps impossible to design a domed building which shall be an unqualified success from every position. If we are asked to appraise St. Paul's from its points of vantage, we should be content also to judge this modern derivative—derivative at least as to the dome—on its most favorable aspects.

The plan has practical advantages which, we must believe, justified its adoption. At any rate it did not prevent the architects from incorporating into the composition of the building a crowning feature of great nobility and beauty. The dome is wholly admirable in line and proportion. Its relation of height to width, of colonnade to vault, and of vault to lantern, is perfect, while its soaring curve is both vigorous and subtle. The colonnade around the barrel is reclaimed from monotony by the groups of sculpture at its base, and there are no dormers to break the swelling curve of the vault. The dome ranks next in size to that of the capitol at Washington, the largest in America; yet it has a far greater appearance of lightness, without loss of dignity. It conveys an absolute impression of distinction and refinement, and there will be many who will pronounce it the most beautiful dome in America.

The composition of the dome with the building is peculiarly satisfying. The flat-domed pavilions with the groups of sculpture over them echo the lines of the great dome with just enough of divergence, and are a detail of great interest and beauty.

The sculpture is well placed and ap-



VIEW FROM WASHINGTON AVENUE—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.

propriate in scale, and, after all, that is what most concerns us here. The group in the tympanum of the south pediment is by Adolph A. Weinman; that in the north pediment, by Attilio Piccirilli. The sculpture in the east and west pediments and the four groups at the base of the colonnade around the barrel of the dome are the work of the late Karl Bitter. The figure crowning the lantern is by Daniel Chester French.

Bitter's groups at the base of the colonnade, one ventures to believe, despite contrary opinion, exhibit at its best his genius for architectural sculpture, a genius first notably displayed at the World's Fair in Chicago. The groups compose admirably with the building, without claiming special attention for themselves beyond recognition of their charming silhouettes. Prof. Schevill, in his biography of Bitter just issued under the auspices of the National Sculpture Society, assumes that the groups were placed beyond "easy inspection" through miscalculation on the part either of the sculptor or of the architects. Of course, there is no warrant for assuming miscalculation, as the groups are effective compositions in relation to the building.

What Prof. Schevill says of Bitter's west pediment is, however, so just and so happily expressed that the liberty may be taken of quoting it at length: "They [both pediments] have been much admired, more particularly the one representing the State of Wisconsin exultantly displaying to the world the wealth of her natural resources. It would be difficult to name a monumental composition of recent years which is more compact or better balanced. Let us remind ourselves that the pediment, considered as a form of art, presents a number of special difficulties. In this pediment of Bitter's they are solved almost playfully, the composition tapering off naturally and gracefully from the erect majestic female figure of Wisconsin in the center to the fishers and hunters reclining at the angles. A horse and an ox, powerfully modeled in simple planes, together with a ram, a fawn, a dog and a badger—this last constituting the loved totem of the State—are distributed among the harvesters and the hunters to call to mind that a State is not only a congregation of men and women, but a complex of woods, fields, streams and animals. A spirit of joyousness envelops the pediment from end to end, supplying the final touch which welds it into unity." A comparison of the illustrations on another page will make clear the superiority of Bitter's west pediment over the others and uphold Prof. Schevill's encomium of it.

The skill which the architects have shown in selecting the positions and the scale for the decorative sculpture is evidenced again in the interior of the building, where many distinguished mural painters and artists collaborated in the embellishment of the principal rooms.

Upon one who for the first time enters this sumptuous interior the general effect which it creates is, of course, largely determined by the rotunda and the staircase halls, which together form one great composition. From the pavilion vestibule one steps immediately into the rotunda. The grand stairways, one in each of the four wings, are recessed, leaving both the view and the circulation unobstructed. Standing in the centre of the rotunda one has a remarkable vista down the corridor of each of the wings.

The rotunda is of noble proportions, seventy-six feet in diameter and reaching 200 feet from the ground floor pavement to the crown of the coffer dome.

Four great arches opening into the vaulted stair halls of the wings are supported in the rotunda on a Corinthian entablature, the frieze of which is of dark rose Numidian marble, resting on columns and pilasters of green Tinos marble, imported from Greece. Many beautiful Wisconsin granites have been used in the rotunda and stair halls, the walls of which are finished with yellow Kasota limestone, from nearby quarries in Minnesota. Over the piers and between the four arches in the rotunda are pendentive brackets, which make the transition from the octagonal form of the rotunda and the circular form of the dome. Above the pendentives is a



NORTH WING—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



WISCONSIN AVENUE DRIVEWAY TO PAVILION —WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.

circular entablature, the cornice of which supports the visitors' gallery. In the barrel of the dome is a Corinthian colonnade with intercolumnar windows lighting the rotunda. The colonnade carries the coffer dome.

The pendentives are decorated with four panels of glass mosaic by Kenyon Cox. These are twelve feet high and have an average length of twenty-four feet.

In the crown of the coffer dome is a great ceiling painting, thirty-four feet in diameter, by Edwin Howland Blashfield.

The decorations of the rotunda, like the sculpture of the exterior, blend harmoniously with the architectural design. It is the superb color scheme, rather than individual parts, which claims attention and "makes" the picture. The dominant note is the full warm tone of the yellow Kasota limestone, which takes a charming, not too high polish. Its color and texture form a delightful contrast with the dark rose and green of the marbles and the sparing enrichment of gold in the mosaics—a brilliant yet exquisite palette of color.

It will be impossible to speak in detail of the rest of the interior, beyond mentioning a few of the more important rooms.

The second floor is the principal one. Here, in the east, west, south and north wings, respectively, are situated the Supreme Court, the Assembly Chamber, the Senate Chamber and the Hearing Room. Each of these main rooms is preceded by an anteroom lobby, which is separated from the grand stair hall by ornamental grille screens. The remainder of the second floor in each wing is taken up by the parlors, consultation rooms, private offices, elevators, subsidiary stairs, etc., serving the principal room. The Senate and Assembly Chambers are connected by a private passageway through the southwest pavilion.

The Assembly Chamber, approximately seventy-three by sixty-eight feet, with a height of forty-one feet, is lighted from above through a circular ceiling light of low-toned leaded glass. On its four sides are flat elliptical arches with pendentive bracketing. The wall behind the speaker's platform is wainscoted in carved oak, above which is a mural painting by Mr. Blashfield. The visitors' gallery occupies the space under the three remaining arches, which are supported upon columns of Breche Violette marble. The walls being in a creamy white South Dover (New York) marble, the finish of the oak is a correspondingly soft natural tone.

The Senate Chamber is circular in plan, thirty-one feet in diameter, and thirty-one feet six inches high, with galleries for visitors on three sides. It also is lighted from above. The walls are of Italian Travernelle, a cream yellow marble, contrasted with columns and pilasters of richly veined Escalette marble, also from Italy. The decorative feature of the room is a mural by Kenyon Cox, occupying three panels between free standing columns behind the president's platform.

The Supreme Court is square in plan. Its walls are finished in Italian Botticino marble, with golden veined Formosa marble panels. The pilasters are of Breche Coraline marble from Italy, the purplish veining of which repeats the color note of the panels. Against the wainscot behind the judges' bench is a treatment reminiscent of Italian Renaissance choir stalls. Each of the four walls contains a mural painting by Albert Herter.

The Hearing Room is intended largely for the use of the Railroad Rates Commission. It has walls of yellow Verona marble, with Monte Rente panels between pilasters, and with a wall base and floor border of Porte d'Or Italian marble in black and gold. In the curve of its coved ceiling are paintings by C. Y. Turner, representing methods of transportation in Wisconsin.

Having spoken of the four principal rooms which, with their dependent rooms, occupy the second floor of the building, we shall mention further only the Reception Room, in the Governor's suite, on the first floor of the east wing. The Reception Room is a derivative of the Council Chamber in the Doge's



SOUTH PORTICO, WITH SCULPTURE BY ADOLPH A. WEINMAN IN PEDIMENT—WISCONSIN STATE CAPITOL.



WEST PORTICO, WITH SCULPTURE BY KARL BITTER IN PEDIMENT—WISCONSIN STATE CAPITOL.



NORTH PORTICO, WITH SCULPTURE BY ATTILIO PICCIRILLI IN PEDIMENT—WISCONSIN STATE CAPITOL.



EAST PORTICO, WITH SCULPTURE BY KARL BITTER IN PEDIMENT—WISCONSIN STATE CAPITOL.



NEAR VIEW FROM CAPITOL PARK—WISCONSIN STATE CAPITOL, MADISON, WIS.
GEO. B. POST & SONS, ARCHITECTS.



DETAIL OF ONE OF THE ENTRANCE PAVILIONS —WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



DETAIL OF DOME AND OF ONE OF THE ENTRANCE PAVILIONS—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



COLONNADE, BARREL OF DOME AND STATUARY BY KARL BITTER—
WISCONSIN STATE CAPITOL.



SOUTHEAST CORNER OF PODIUM AND STATUARY BY KARL BITTER—
WISCONSIN STATE CAPITOL.



ONE OF THE ELEVATOR HALLS ON THE GROUND FLOOR—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



SECTION THROUGH EAST AND WEST WINGS —WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



DETAIL OF ARCH BETWEEN GALLERY AND STAIR HALL—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



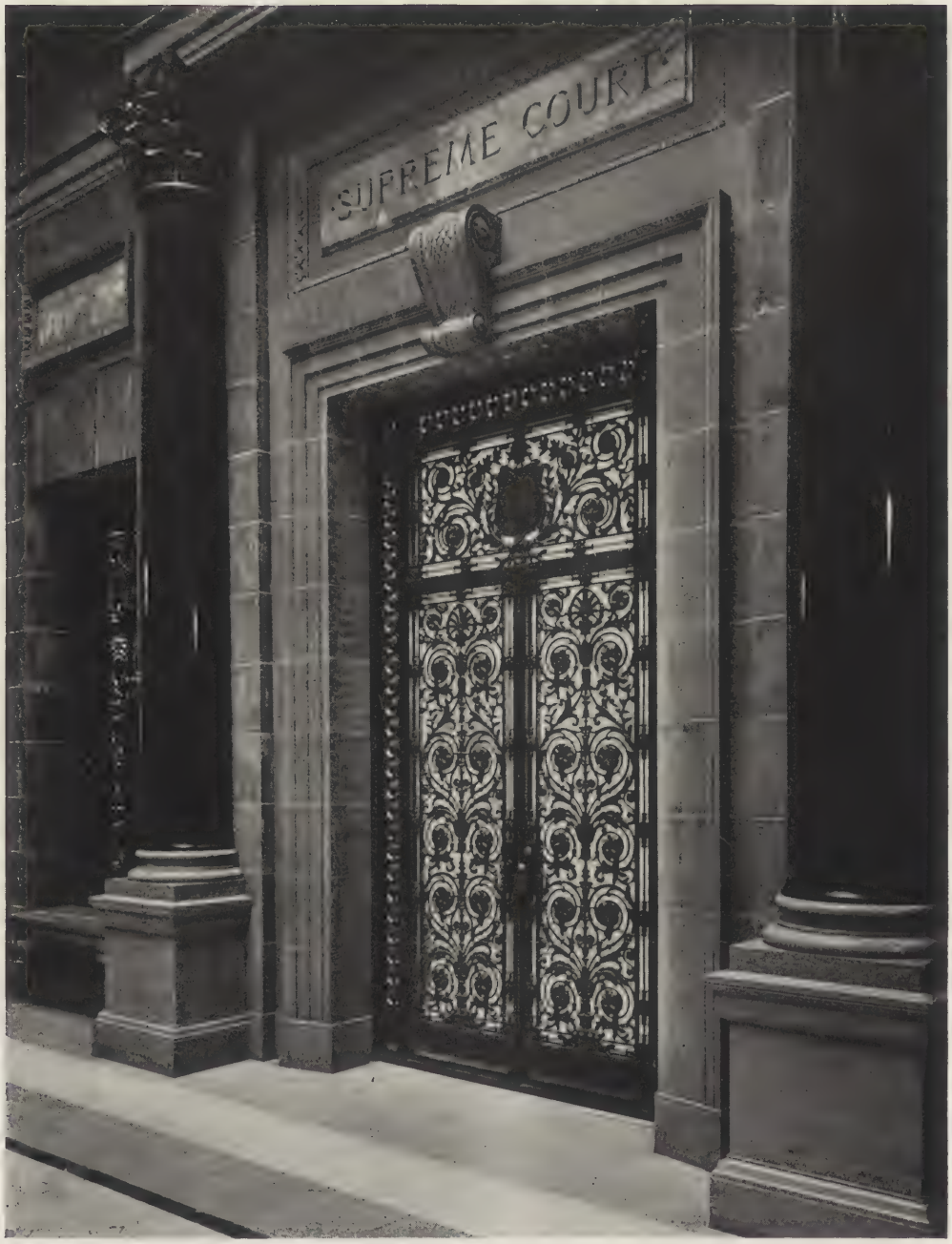
LOOKING INTO EAST STAIR HALL FROM GALLERY—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



VIEW IN ROTUNDA, SHOWING PIER AND PENDENTIVE—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



STAIRCASE HALL AT FIRST STORY—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



DOORWAY OF SUPREME COURT—WISCONSIN STATE CAPITOL, MADISON, WIS.
GEO. B. POST & SONS, ARCHITECTS.



SUPREME COURT, WITH MURAL PAINTINGS BY ALBERT HERTER—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



SUPREME COURT, WITH MURAL PAINTING BY ALBERT HERTER—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



SUPREME COURT, WITH MURAL PAINTING BY ALBERT HERTER—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



WALL TREATMENT AT REAR OF ROSTRUM IN SUPREME COURT—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



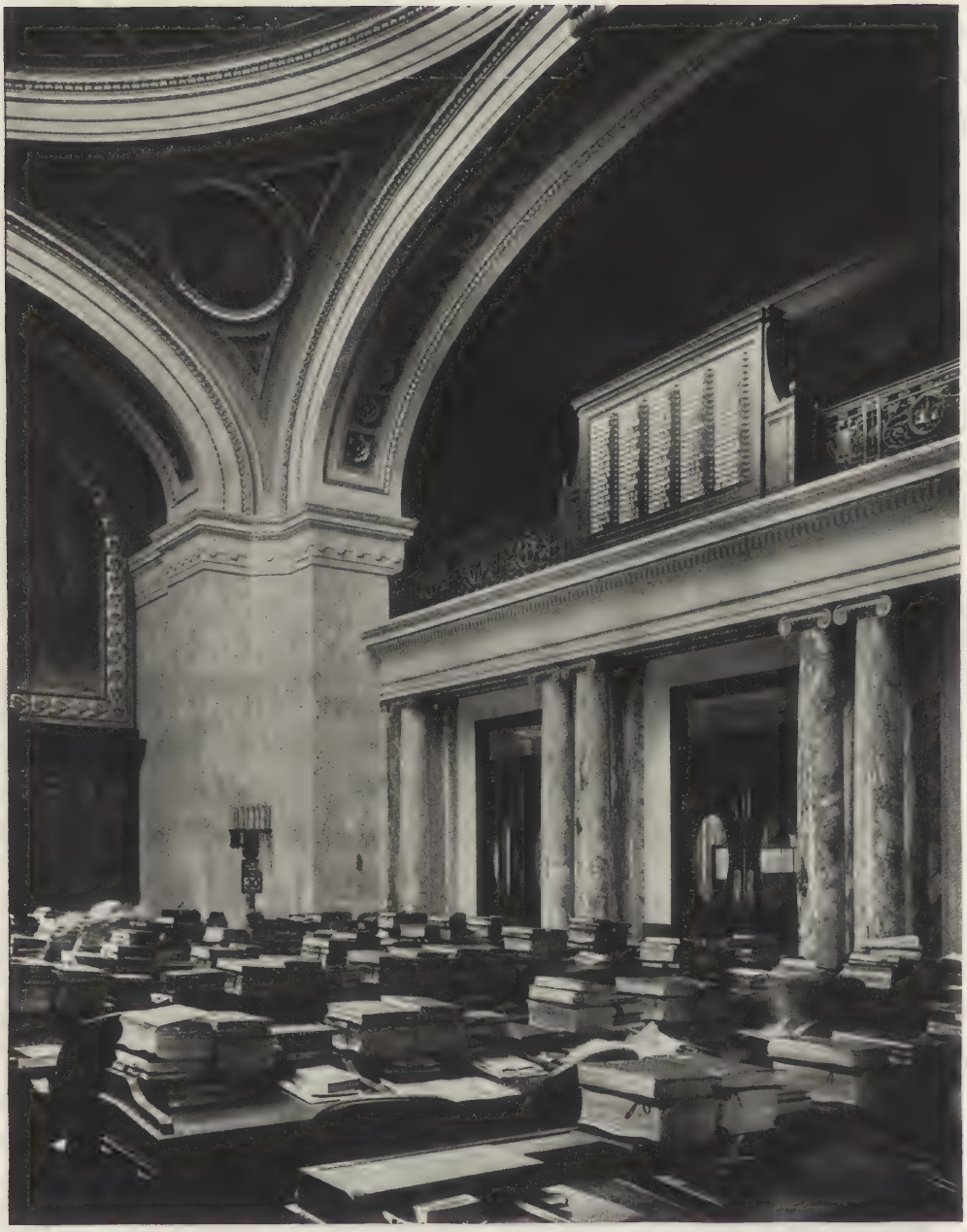
DETAIL OF ENTRANCE TO SUPREME COURT —WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



SENATE CHAMBER—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



SENATE CHAMBER, WITH MURAL PAINTINGS BY KENYON COX—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



ASSEMBLY CHAMBER—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



ASSEMBLY CHAMBER, WITH MURAL PAINTING BY EDWARD HOWLAND BLASHFIELD—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



LOGGIA OF ASSEMBLY CHAMBER—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



DETAIL OF GOVERNOR'S RECEPTION ROOM—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



LOBBY OF GOVERNOR'S RECEPTION ROOM—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



GOVERNOR'S RECEPTION ROOM, WITH CEILING AND MURAL PAINTINGS BY HUGO BALLIN—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



DETAIL OF SENATE PARLOR—WISCONSIN STATE CAPITOL,
MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



SENATE PARLOR—WISCONSIN STATE CAPITOL, MADISON, WIS. GEO. B. POST & SONS, ARCHITECTS.



ENTRANCE TO HEARING ROOM (NOT YET FURNISHED)—WISCONSIN STATE CAPITOL, MADISON, WIS.
Geo. B. Post & Sons, Architects.



SIDE OF HEARING ROOM (NOT YET FURNISHED)—WISCONSIN STATE CAPITOL, MADISON, WIS.
Geo. B. Post & Sons, Architects.

Palace in Venice, and its ceiling and wall have paintings by Hugo Ballin.

There are many other interesting rooms which cannot be discussed here. Nor is space available for describing the admirable mechanical equipment.

The favorable impression created by the exterior, with its superb crowning feature, and by the rich, colorful rotunda, is confirmed upon inspection of the principal rooms. Everywhere one is bound to admire the well-informed and workmanlike architecture and its equally well-informed and workmanlike embellishment; and one is apt to take leave of the building with a feeling that it epitomizes the American art of today, an art of splendid technique which only too often evokes a cold admiration because of hackneyed themes, but which redeems itself with occasional flashes of inspiration.



DECORATION OF CROWN OF GREAT DOME BY EDWIN HOWLAND BLASHFIELD—WISCONSIN STATE CAPITOL, MADISON, WIS.
Geo. B. Post & Sons, Architects.



ENTRANCE—THE LINKS CLUB, NEW YORK CITY. CROSS & CROSS, ARCHITECTS.

The LINKS CLUB NEW YORK CITY

CROSS & CROSS, ARCHITECTS

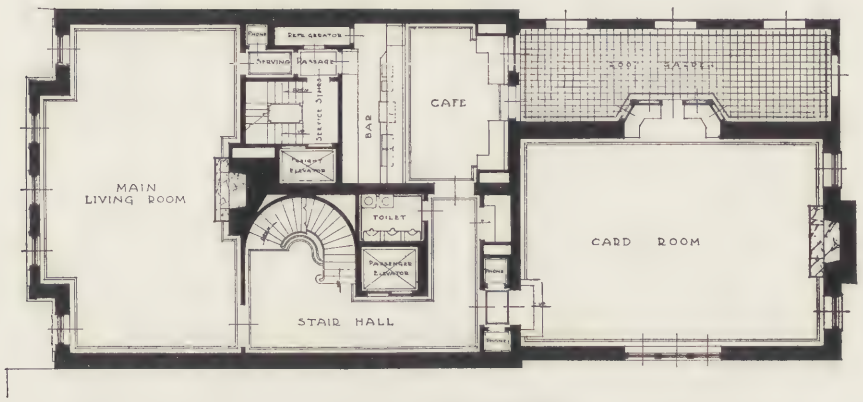
By John Taylor Boyd, Jr.

THE Links Club deserves to be noted even in the increasingly long list of the clubs of New York City. Messrs. Cross and Cross have furnished a design that does not intrude its architectural features on the passer-by—might, indeed, go unnoticed by a certain type of Americans who seek anxiously for the striking or the imposing in architecture, who prefer buildings made conspicuous with columns or arcades. Instead of appealing to this section of the public, the Links Club is designed for those who like the effects of quiet breeding, traditional elegance, of considered good taste, yet do not carry "conservatism" to that excess where dulness begins and Victorian gloominess is held to be a virtue. Inside the clubhouse and out there is a liveliness, even sparkle, that is characteristic of the best contemporary New York work. On the exterior this is evident in the iron grilles of the basement windows, the boxes of flowers above them, and in the touch of enrichment provided by the treatment of the main floor windows. The scale is perfect, yet not over-exquisite, for it contrives to express the sober Anglo-Saxon traditions of respectability expected in an American club. Indeed, this Georgian directness and gentlemanliness is the keynote of the entire design, which has been refined and relieved with enough contrasting bits of decoration to give it a character distinctly American. In other words, on an English basis has been added our native sense of form, our cheerfulness and our American *chic*.

To understand the character of the Links Club itself is to appreciate better the architecture of its house. It is a band of golfing gentlemen, members of various golf clubs in the country, who desired a small place in the city, a comfortable and cozy home in which the only feature directly connected with their cherished pastime should be a dressing room for changing clothes before going out to the country to the links or after returning thence. They did intend a roof garden on which to practice golf, but gave up this idea in favor of a summer dining room.

Architecturally, this somewhat original, intimate personality of the organization was impressed upon the building. Yet curiously, too, the ideas of the builders, though completely carried out, seem to have developed gradually, almost casually. Instead of a formal, strained effort, they appear to have desired to let the design evolve of itself, to allow circumstances to work out their own solutions. Right here is a most important feature of the Links Club; through a leisurely considered process of working out the design came virtues of interest, charm, fitness, of good style, that too often are lost in the usual methods of building in a hurry. By rushing drawings through, by forcing the architect to be practical and "deliver the structure in record time," character and personality are bound to be lost. This is why too many of our buildings look ready-made and consequently somewhat out of place in their situation.

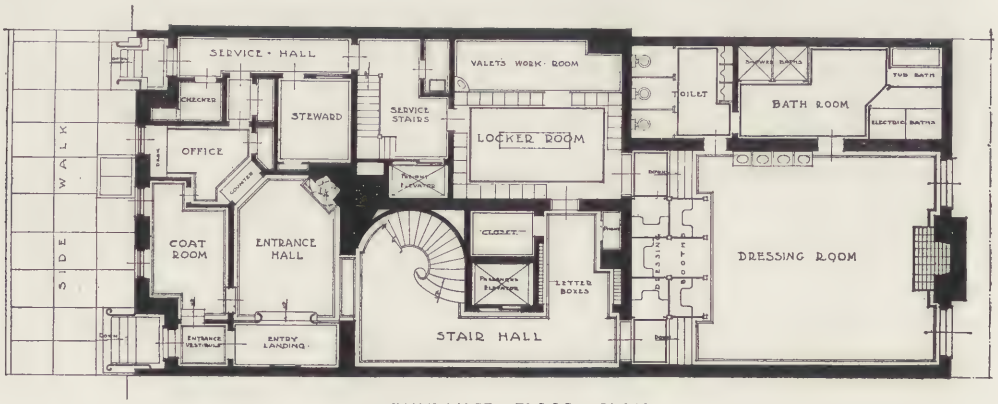
The builders showed another bit of wisdom by choosing two old houses, which were altered to contain the new club. It is now well known that the haphazard conditions of an alteration, instead of hampering the architect, often lead him into unexpected successes. In boldly meeting obstacles, such as unsymmetrical axes, story heights too low, stairways in odd corners, he achieves a freshness of treatment, often informal, that he might hardly attain in a carefully reasoned out new design. He is forced away from routine and long habits unconsciously developed into a region where inklings of genius may perhaps



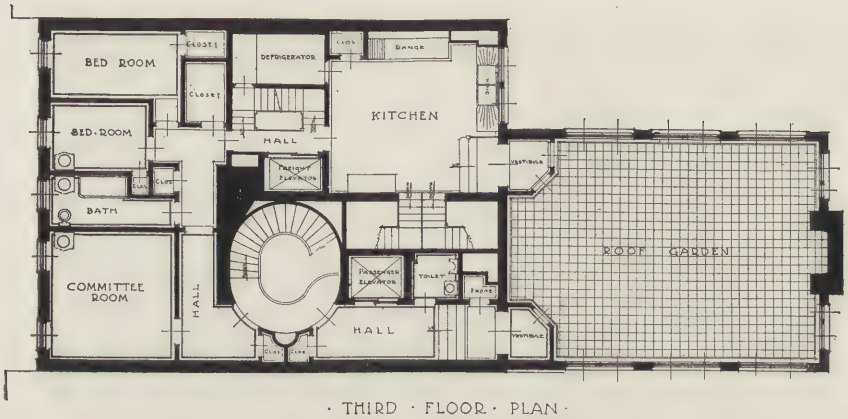
FIRST · FLOOR · PLAN ·

be chanced upon. An instance similar to the Links Club is the Harvard Club of New York, which is in its present form the result of three distinct building operations, as described in the Architectural Record for December, 1915. On the front of the Links Club an old building restriction resulted in a further excellence—I mean the fine pavilion-like two-storied projection on the exterior. This afforded the architect a chance for strong decorative motive, in which he has combined Georgian solidity with Italian-like delicacy of relief and scale. In details the scheme is worked out in coarse brick with burnt headers laid in yellowish joints, and in a stone that is native to the West but which has not hitherto been brought eastward, resembling the Italian travertine in color and texture, while being somewhat warmer. The roof is a heavy greenish slate.

The plans show the arrangement inside. The diversity obtained by the alteration of two old houses appears clearly, particularly the old party wall, which has been retained on the entrance and first floors. The entrance is down a few steps from the sidewalk level—the old-fashioned "basement" entrance. Adjacent are the usual coat-rooms, lobby, office and stair conveniences common to clubs, and, in this case, the large dressing room peculiar to the Links Club. The dressing room is four steps down at a lower level, made homelike with a large fireplace, and is connected with locker room and lavatory conveniences. The change in level at the lobby, the corners cut off by fireplace and office counter, the good curving stairway—these are some of the interesting details of the entrance floor in which the special conditions imposed on the alteration seem to assert themselves.



ENTRANCE · FLOOR · PLAN ·

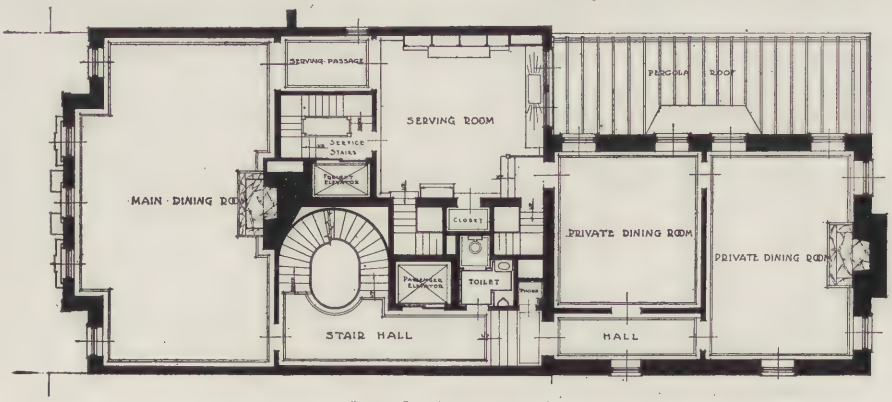


· THIRD · FLOOR · PLAN ·

The main floor above is skillfully planned, gaining the greatest effect of spaciousness by contrast of small with large units. The service details are ample and well compacted. The telephone booths are convenient, yet not obnoxiously so, as we so often find them, for here they have a considered, though subordinate, place in the plan. These practical details are most important in a club, and, if any of them fail to work, the members are made uncomfortable and the house committee miserable.

On the second floor are to be found the dining facilities—a large room across the front and two smaller private dining rooms to the rear opening on a little terrace. Kitchen and roof garden are on the top floor above, with a committee room and two small bedrooms across the front.

The rooms resulting from these arrangements of plan have been designed and furnished in perfect taste and with a care and attention to details that cannot be too highly praised. The best New York standards are everywhere apparent in the harmony, smoothness, and richness of the decoration, and in their delicate scale so necessary in an interior. In this last respect, delicacy of scale, the living room and card room of the Links Club are unusual indeed. The living room woodwork is that of an old English oak room designed by Sir Christopher Wren, to which enough new wood was added nearly to double its size, though the skill of the wood-finisher has blended the new into the old in a way to make the difference not apparent. The splendid portrait over the mantel is one of William Pitt, by Hoppner. A green carpet, green cut velvet curtains, furniture, mostly antique, of needlework cut velvet, with some modern leather pieces, are the furnishings of a beautiful room, of which the remarkably fine design of the chimney-breast is the main feature.



· SECOND · FLOOR · PLAN ·



THE LINKS CLUB, NEW YORK CITY.
CROSS & CROSS, ARCHITECTS.



ROOF GARDEN—THE LINKS CLUB, NEW YORK CITY. CROSS & CROSS, ARCHITECTS.



LIVING ROOM CHIMNEY-BREAST—THE LINKS CLUB, NEW YORK CITY. CROSS & CROSS, ARCHITECTS.



LIVING ROOM—THE LINKS CLUB, NEW YORK CITY. CROSS & CROSS, ARCHITECTS.



MANTEL IN CARD ROOM—THE LINKS CLUB,
NEW YORK CITY. CROSS & CROSS, ARCHITECTS.



CARD ROOM—THE LINKS CLUB, NEW YORK CITY, CROSS & CROSS, ARCHITECTS.



MANTEL IN DINING ROOM—THE LINKS CLUB.
NEW YORK CITY. CROSS & CROSS, ARCHITECTS.



DINING ROOM—THE LINKS CLUB, NEW YORK CITY. CROSS & CROSS, ARCHITECTS.



DOORWAY IN DINING ROOM—THE LINKS CLUB,
NEW YORK CITY. CROSS & CROSS, ARCHITECTS.

The card room, on the same floor, was designed to contain a set of five landscape paintings by Jan Hendrik Troost, a Dutch painter of the eighteenth century, who painted them for a house in Amsterdam. Unusual in color and composition, they are enframed in a scheme of paneling of a soft green of the tonality of the paintings. The doorway and mantelpiece are both Georgian pieces discovered in New York, the latter an exquisite bit of design, furniture-like in scale. The ceiling of this room is skillfully detailed and, in its airiness and lightness, holds its place, and does not have the effect of being so top-heavy that it seems about to fall—a sure indication of an unsuccessful ceiling design. Proper lighting comes as a problem in card rooms, and here its solution takes the form of indirect lighting above the cornice with satisfactory results. The equally important ventilation is managed in the decorative band of the ceiling, where it is less obnoxious than such vent grilles usually are. The curtains and carpet are of dull gold, and the few odd pieces of furniture in plum-colored cut velvet complete an effective color scheme.

The dining room is ivory white, twenty-three feet wide and thirty-eight feet long, in plain large panels. It looks rather bare now, but is intended to be decorated with good paintings to be acquired gradually, in an assurance of obtaining the best possible—another instance of the patient and faithful spirit which has inspired the design of the club. Among countless mantels brought to our attention this one of the Links Club living room stands out as a rarely perfect and charming example. It is an old one, probably of Adam design. The sideboard and china cupboard are original Hepplewhite pieces, the other furniture being made to correspond to them. The private dining rooms are of the same character as the main dining room.

In the roof garden the club has a comfortable lounging place, which conforms to type only enough to be sure of avoiding the tiresome third-rate German effect which an unhappy custom has ordered for such chambers. The walls are stone, stucco and painted brick, the floor of red "quarry" tile and the ceiling of yellow pine, painted and scraped to harmonize with the walls. Here is an instance proving that the designers have appreciated the truth that open-beamed ceilings may be built of inexpensive wood successfully. Let me say that the furniture is practically all old, and, for the benefit of those who like labels, the chairs are known as Lancashire slipper chairs. It will be noticed that the room is decorated with flowers and plants, a characteristic of the rest of the house. These, with the old candle bracket lighting fixtures and an excellent collection of old prints, invest the Links Club with a character unusual in clubs in this country.



CATHEDRAL OF SOISSONS BEFORE THE WAR. FROM GUERINET'S "L'ARCHITECTURE ANCIENNE ET MODERNE EN FRANCE."

The DESTRUCTION OF HISTORIC BUILDINGS AS REVEALED *by the* OFFICIAL FRENCH WAR PHOTOGRAPHS

By THOMAS E. TALLMADGE

I.—The Cathedral of Soissons*

OF the three French cities that have suffered most at the hands of the German spoilers—Reims, Arras and Soissons—Soissons is the least known; and its devastation, overshadowed by the greater tragedy of Reims and the more complete destruction at Arras, has attracted, on this side of the Atlantic, little attention. Yet Soissons possesses, according to Fergusson, the first cathedral of the second rank in France; and the damage done to this church should cause sorrow in the hearts of all architects and lovers of Gothic art, and should awaken in us, if not a desire for revenge, at least a determination to assist in some way in its restoration.

The Eglise Cathedral de Saint Gervais et Saint Protais, among her many lovely sisters in the Isle de France, some of which undoubtedly outshine her in the radiance of their beauty, stands modestly, like the gentle Griselda, in the background. If we would know her charms we must seek them out; they will not be thrust upon us.

Of the church, built almost entirely in the Gothic style, cruciform in plan, with three-aisled nave and transepts, the most interesting feature is the south transept. This would be unique if it were not for the round-ended transepts of Noyon, a feature common enough in Germany. This curious and lovely construction is ascribed ordinarily to the years 1180-90. Its charm is further complicated and enhanced by a similar budding in circular form of a two-storied chapel from its side. The transept is in four stories—a high arcade, two triforia and a clearstory. The style is transitional, the vaulting sexpartite. Porter says: "This portion of Soissons, one of the most ethereal of all twelfth century designs, is the highest expression of that fairy-like Saracenic phase of Gothic art that had first come into being at Noyon." Having sown its wild oats in the wayward and wanton architecture of its south transept, the cathedral settles down to the straight and narrow path of architectural decorum; and the nave, choir crossing and north transept are remarkable for their austerity, dignity and grandeur. The choir was completed in 1212, then the nave, and last the north transept, which Porter dates about the middle of the thirteenth century.

The interior gives, or did give, the impression of "architecture first." This is owing to its carefully studied proportions, its exact compliance with all the rules of Gothic design, its simplicity and directness; besides, the joints seem to be of black cement, which strongly emphasizes the stereotomy. The total length is 345 feet, and height from floor to vault, 100 feet.

The exterior is not remarkable; indeed, the façade, in its rebuilt form, is awkward almost to ugliness.

The tower and arcade, evidently prompted by that of Nôtre Dame, was completed in 1414. An interesting feature of the facade is the portal of the north transept. This is an excellent example of that rare thing in architecture—fourteenth century Gothic.

The Germans have been in the vicinity of Soissons since September, 1914, though their nearest approach was after

*The author of this article wishes it understood that he is not writing from personal observation of the injuries to the cathedral. He follows various contemporary accounts, his chief authority being the photographs herewith published. The photographs were obtained by him for the Art Institute of Chicago from the French Ministry of War through the influence and kindness of Mr. Whitney Warren. They are the official war photographs, and have not previously been reproduced. For information regarding the archeology of the cathedral he is indebted to Kingsley Porter's "Mediaeval Architecture," and to "Les Archives de la Commission des Monuments Historiques."—Editor.



THE TOWER, LOOKING NORTH-WEST—SOISSONS CATHEDRAL.



LOOKING SOUTHWEST AND SHOWING HOW TOWER
WAS USED AS THE TARGET—SOISSONS CATHEDRAL.



THE CLOISTER—
SOISSONS CATHEDRAL.



THE NAVE, LOOKING EAST, SHOWING
THE DESTRUCTION OF THE VAULTS.



THE RUINED CLEARSTORY FROM THE ROOF OF NORTH AISLE—SOISSONS CATHEDRAL.



VIEW LOOKING NORTHWEST, SHOWING DESTRUCTION OF CLEARSTORY AND TRIFORIUM OF SECOND AND THIRD BAYS—SOISSONS CATHEDRAL.

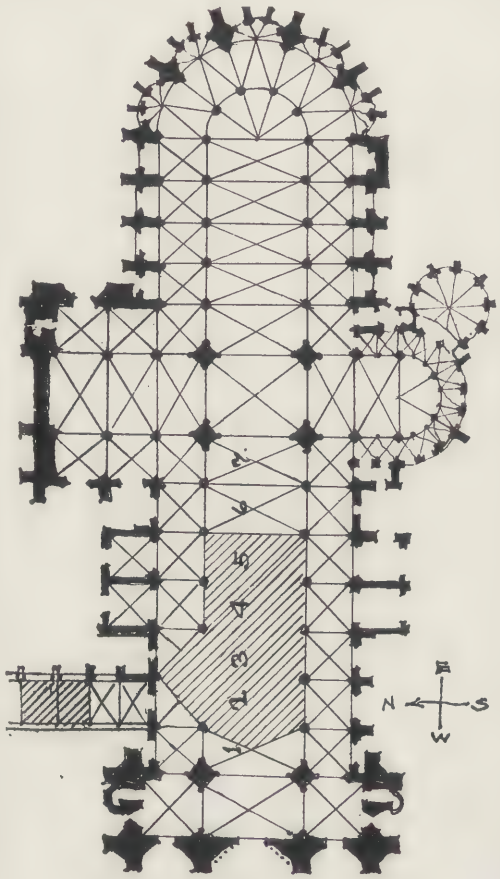


THE RUINED BAYS FROM THE SOUTH AISLE—SOISSONS CATHEDRAL.



LOOKING EAST TOWARDS THE APSE, SHOWING DESTRUCTION OF THE VAULTING OF FOUR BAYS—SOISSONS CATHEDRAL.

the drive of January 13, 1915, when they succeeded in forcing the French across the Aisne. In March, 1917, the Germans were driven back. During three years, therefore, the church has suffered from a desultory bombardment. From the absence of shrapnel defacements, from the completeness of the destruction where it occurs, and from the evidence of slates blown from the roof, it would seem that the damage was caused by a few shells of large calibre exploding inside the nave. The shells were fired from a point a little west of north, as the exterior plainly shows. The target was evidently the tower, which shows the mutilation of several direct hits. The shells that fell a little short did far more damage by penetrating the clearstory windows and exploding in the nave or by exploding against the buttress and flanks of the church.



PLAN OF SOISSONS CATHEDRAL.
From "Les Archives de la Commission des Monuments Historiques," with Cross-Hatching Added to Show Destroyed Portions.

The damage consists in the total destruction of four vaults of the nave ceiling and a portion of the westernmost vault; the total destruction of the entire system of two bays (the third and fourth from the west on the north), including pier, triforia and clearstory; the entire destruction of two bays, including walls and vaults of the small cloister opening from the north into the second bay.

On the exterior, besides the damage to the tower already referred to, we find the destruction of the flying buttress between the second and third bays. It would be interesting to know if the destruction of this buttress, which was double, caused the collapse of the contiguous vaults.

In the clearstory of the third bay the tracery and glass are entirely destroyed. The jambs of the aisle windows of the second and third bays have both been struck by shells, as is clearly discernible in the photographs. The large holes in the roof were evidently caused by the fall of the northeast corner of the tower.

There is no indication in the photograph of damage by fire or of damage to other portions of the church, though from its position in the line of fire it is unlikely that the north transept has escaped unscathed.

Fortunately for Soissons, it can be safely said, "There passed the Hun." He is gone never to return, and he is not, as at Reims, still torturing his victim. The highly localized destruction, as of the two bays, at Soissons would make it possible to restore the cathedral at small expense and without the expenditure of money in repair of various and separated portions of the church.

What a magnificent monument to our love for France and her architecture would be the two bays and vaults of Soissons, rebuilt by the architects of America! If such a monument could be built during the progress of the war, besides its inspiration to the French, it would show to all the world our conviction that the spoiler has been driven out of that fair country to return no more.

NELSON GOODYEAR
ARCHITECT & INVENTOR

By
John Mead Howells

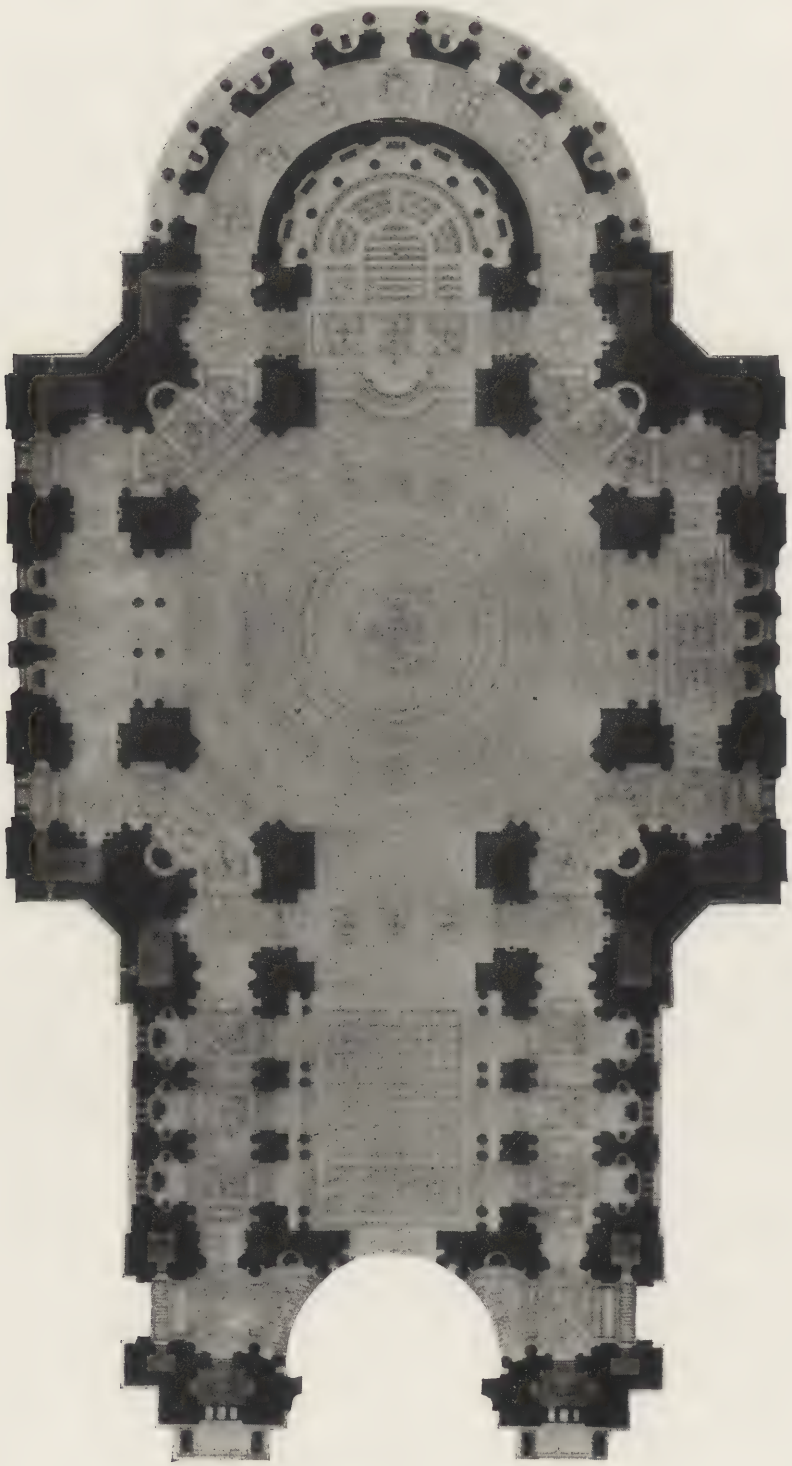
FAMILY groups and sequences can be cited in the history of most, if not all, of the arts. In Renaissance times many fathers and sons followed the same line, and sometimes other members of the less immediate family, as in the case of the Della Robbia. Then we have the architect Bramante and his nephew, the famous Raphael. There are the Amati family, who made violins, and later the Adam brothers in English architecture. I believe, however, there is no such remarkable family sequence as the Goodyear family of American inventors.

In the early part of the last century Charles Goodyear was at work in New Haven on one of the greatest commercial gifts to mankind—the vulcanization of India rubber, without which the gum is worthless. Like the typical inventor, Charles Goodyear used up his money in enthusiastic attempts at commercializing rubber. Just as typically, his neighbors and community regarded the whole matter as absurd to attempt and worthless to achieve; but today their grandchildren are dependent for their hospital work, their electrical industries and the protection of their life and health in many ways on Goodyear's absurdity. How much wiser he was than his community is now realized; but one scarcely takes time to realize the heroism which was conscious that this thing must be achieved at the expense of the comfort of himself and his family, and also knew that appreciation must come too slowly for them to profit. The first India rubber was vulcanized on the kitchen range of his home, to the recorded inconvenience of his devoted wife.

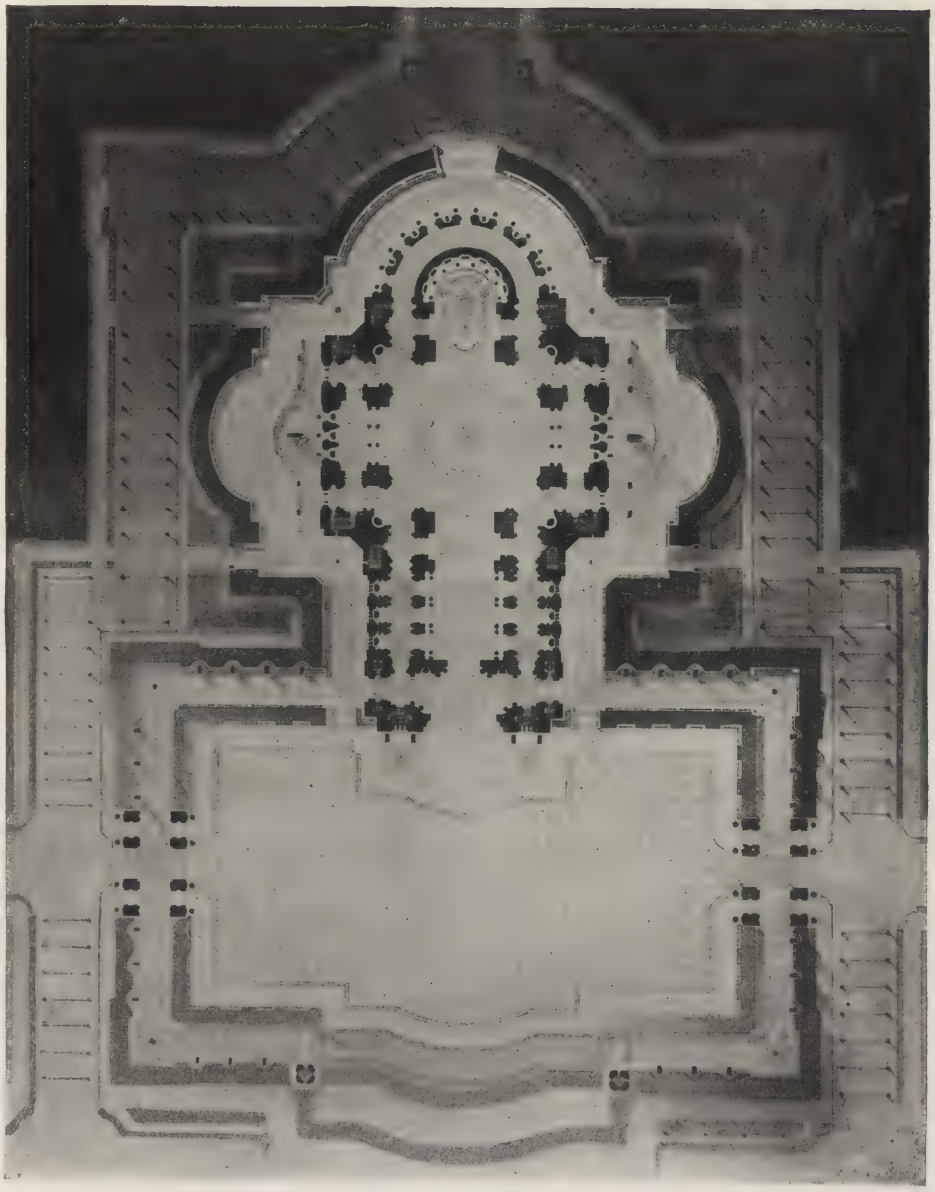
Then came the second generation. His son, Charles Goodyear, after years of study, invented and perfected the apparatus that was to make shoes for the world by machinery, this time a machine of great intricacy. He, too, was treated with obloquy, not only because he intended to rob the shoemaker of his last, but because a machine could not make a shoe, and if it could the shoe would be worthless. It sounds again like the phophecies against India rubber. But today the world is shod with machine-made shoes and a vast shoe machinery company is making its dividends out of Goodyear's conception.

But the third member of the sequence in the third generation, Nelson Goodyear, did not begin as an inventor. He began as an architect, and an architect of high and perhaps revolutionary ideas, although little beyond the understanding of his friends and admirers is left to prove this. While Nelson Goodyear was growing up the family had a period of prosperity and owned estates in the North and in Florida, but Nelson left while very young to travel with another architectural member of his family, the well-known Professor Goodyear, the discoverer of the linear refinements in the medieval cathedrals, whose remarkable photographs and articles on this matter were given to the public some years ago through the Architectural Record. Young Nelson traveled with him during his early observations and assisted at the taking of these photographs.

It was this analysis of the cathedrals which turned his mind to architecture and which decided him to study for the Ecole des Beaux Arts in Paris, in the Atelier Du Monclos, although he never entered the School itself. His careful study of the cathedrals made him alive to the lack of simplicity and structural truth, not only in the many problems exhibited at the School, but in most modern churches, and he often spoke of two remarkable defects of large church planning, whether on paper, in the student's work, or in execution. These were, first, the lack of study of the plan or points



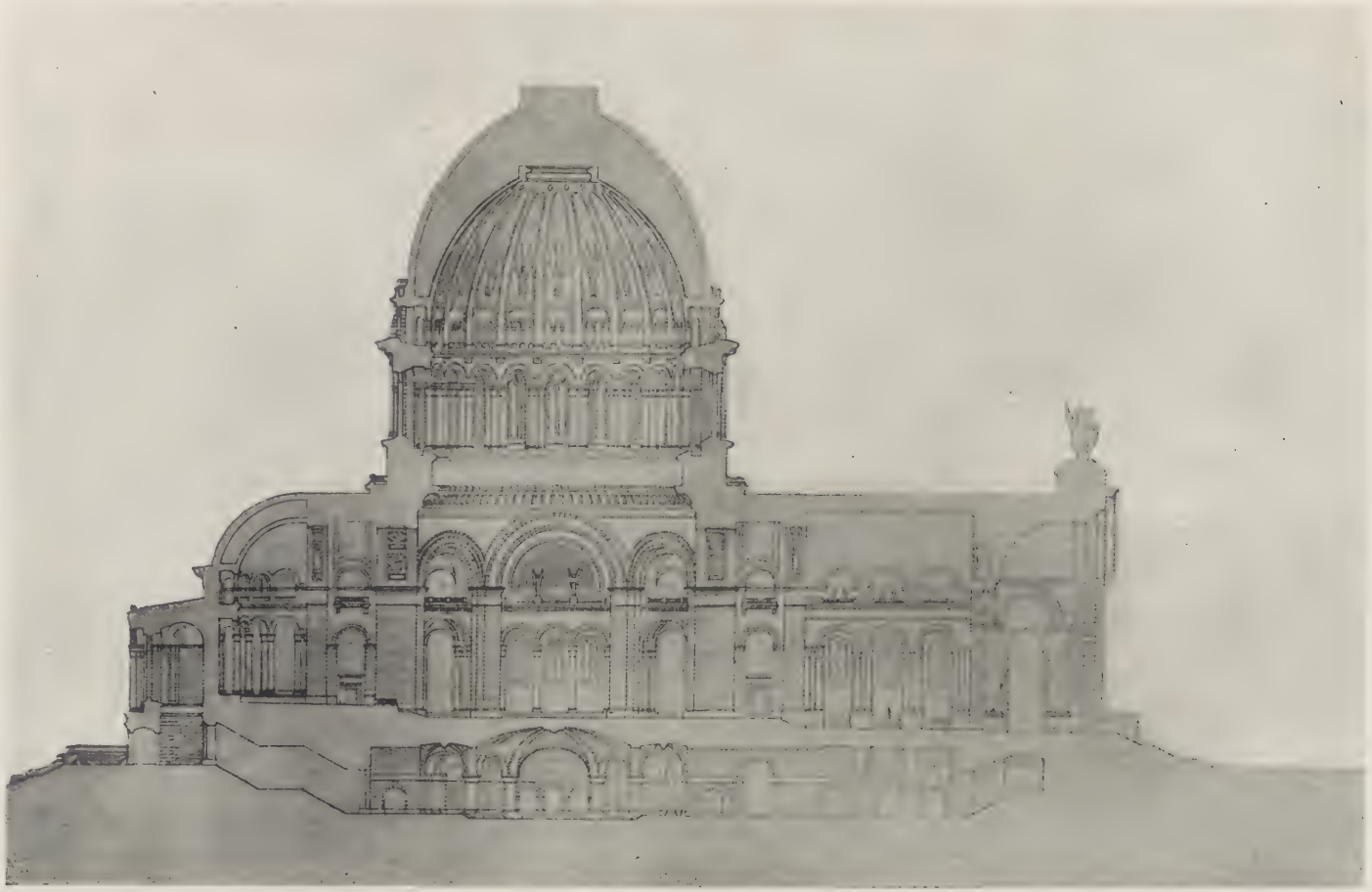
FLOOR PLAN ENLARGED FROM PHOTOGRAPH OF **GROUND PLAN** REPRODUCED ON NEXT PAGE.



GROUND PLAN OF CATHEDRAL—
A STUDY BY NELSON GOODYEAR.



BIRD'S-EYE VIEW OF CATHEDRAL
—A STUDY BY NELSON GOODYEAR.



SECTION OF CATHEDRAL—A STUDY BY NELSON GOODYEAR. THE LINE OF SIGHT FROM THE ENTRANCE TO THE SPRINGING OF THE DOME, REFERRED TO IN THE TEXT, IS ONLY FAINTLY VISIBLE IN THE PLATE.



PERSPECTIVE OF CATHEDRAL—
A STUDY BY NELSON GOODYEAR.

of *poché,* in such a way as to give open vistas; and, second, the falseness of the curtain-wall and even the curtain-roof construction, beginning with the admitted falsity of Sir Christopher Wren's St. Paul's, and ending with almost any large modern church.

The ground plan herewith reproduced was the result of a number of years of arrangement and rearrangement, and what is particularly striking in it, at first glance, is the open vista down the side aisles. The openness and careful study of the pendentive points in plan allows the full width of the side aisles to continue directly down the church, around the apse, and back again. The openness of the whole centre of the church is seen not only in plan, but by the line of sight on entering the church, which shows on the section as he himself drew it. Goodyear carried the idea of constructional truth to a point of believing that a vault covering a church, which certainly looks like its roof from the inside, should be its roof in fact. In other words, the stone vaults should be so carefully designed and so honestly constructed that the surface of the extrados should really be the roof; and that only false vaulting or bad work need be covered by a second roof. This last idea is shown in the little bird's-eye view, where the curved outside surface of the vault shows plainly as the roof of the church.

In dreaming of a completed domical building on the lines he had developed, he kept in mind the special beauties of all the domes he had studied. "I think," he wrote to a friend, "of the Bramante and the Michael Angelo designs for St. Peter's, of the Pantheon at Rome, of St. Mark's, of St. Sophia's, St. Paul's, 'Les Invalides,' of the Mosques at Ispahan and Cairo, of 'Florence' and many, many that I know so well." * * *

Nelson Goodyear died suddenly of pneumonia last March, and these rough sketches were found in his portfolio with dozens of others, and were never meant by him to be seen, much less to be published. But he was too busy a man outside of architecture ever to get further with the demonstration of this idea of letting the structure be its own architectural expression.

Goodyear was also a chemist, and when he gave up architecture he became probably the best known acetylene engineer in this country and the inventor of much of the apparatus for the application of this and other gases. The Panama Canal is buoyed today with an acetylene buoy of his design, the government having bought this and other of his inventions. Although his inventions were too technical to be readily understood, he ranks with his father and grandfather as an inventor; and had he not died so young, would surely have caught the popular imagination with some gift to mankind equaling theirs. Memorials are erected with alacrity to generals and statesmen who serve their country, but it would be hard to find a family whose services to its nation are as worthy of public recognition as the Goodyears.

RENAISSANCE ARCHITECTVRE AND ITS CRITICS

By A.D.F. HAMLIN

PART II- *Neo-Paganism and Art*

AS in the case of The Critics vs. Roman Architecture, discussed in the Architectural Record for April and May, 1915, the critics—that is to say, a certain class of critics—have brought against the architecture of the Renaissance a heavy indictment for high crimes and misdemeanors. The accusers are men of note, whose judgment in matters of art the public has been led to accept as of great weight, and they have been followed by a long train of lesser lights, both professionals and laymen in architecture, who have accepted their opinions as law and gospel and have echoed their *dicta* with the fervor of disciples. Ruskin first and Fergusson next, among the Englishmen, Moore among the Americans, have been the leading attorneys for the prosecution, but the number of the assistant counsel has been very large.

It is interesting, and rather singular, that those who have been most deeply interested in the defendant have paid but little attention to the indictment. They have allowed the accusers to carry their charges about for some seventy years from one to another part and session of the great court of public opinion, without troubling themselves very much about the result. They seem to have so solid a confidence in the character of the defendant and his (or its) ability to plead his own case that they have used little ink and paper in arguments to meet the enemy's allegations. They seem to have thought it sufficient to recite the life history of their client and point to his works as an answer to his detractors.

Of late, however, they have begun to take notice of the indictment, and to meet its charges with specific denials, demurrers and defenses. I purpose to attempt a brief summing up of the case—the chief arguments *pro* and *con*.

The general charge, of which the several counts of the indictment are the detailed specifications, is that of insincerity. Artistic trickery, superficiality, the divorce of decoration from construction, affectation, falsehood and sham are alleged against the architecture of the Renaissance as a whole, and against every one of its great masterpieces. These gross defects are considered to be the fruit of an underlying paganism, fed on the worship of antiquity; of a pervading immorality, due to the revolt from the authority of the Church, and working its malign influence into every phase of art and life. The new individualism which marks all Renaissance art was a lawless individualism; it replaced the corporate progress of art of the Middle Ages with a kind of artistic anarchy, destructive of all real life and progress in design. Corporate religious inspiration having disappeared, the arts sought inspiration in the works of pagan antiquity; not in its finest works—the Greek art of Pericles' time—but in its later and inferior Roman productions. Thus art was degraded from its former high estate, devoted to the ends of luxury and self-indulgence, and made the servant of all the sins and corruptions of an irreligious and immoral culture. In architecture there were some fine and impressive works produced; there was much of sensuous beauty of detail; but its principles were false and its beauty wholly specious. It has never recovered what it lost with the decay of the Gothic styles.

Having lost the medieval inspiration and the medieval honesty of design, and turned to the false gods of ancient Rome, the architects of the Renaissance ceased to invent and took to copying. Captivated by the facility of design with the Roman Orders, they outdid the Romans in the falsity and formulated mechanicality of their use. More than ever the exterior became a sham, a deceptive dress unrelated to the real construction, and all the falsities of Roman architecture were repeated and have been perpetuated

for nearly five hundred years since the practice first began.

Such is, in brief summary, the indictment. It is found in various volumes by Ruskin, Fergusson, Moore, Sturgis, Statham, Porter, Cram and others. It is difficult to present it adequately without quotations much more voluminous than my limits will permit. I can only give samples of these charges, and must then refer the reader to the volumes from which they are taken and to the other writers whom I have mentioned. To some extent I must repeat passages quoted in my last paper in the August Architectural Record.

Professor Moore, in the Introduction to his "Character of Renaissance Architecture," after drawing a glowing picture of the religious fervor of the Middle Ages, of which Florence's Fine Arts were an outgrowth and expression, describes the "neo-pagan spirit" of the Renaissance "which favored and strengthened a growing indifference to moral beliefs." "The animating spirit of the movement contained much that was unchristian and destructive of high ideals." "Into the service of this luxurious and immoral life the Fine Arts were now called, and of the motives which animate such life they became largely the expression." They were made to "minister to sensuous pleasure and mundane pride." In doing this the architects and sculptors turned to the models of antiquity, of a decadent antiquity. But as it was impossible for modern men to "approach the ancient themes in the spirit of the ancients," this art of the Renaissance is not wholly spontaneous and sincere; and, owing to elements incompatible with the pagan spirit, it became "an embodiment of heterogeneous ideas and conflicting aims."

Turning then to the individualism of Renaissance architecture, he observes that "architecture of the highest excellence can hardly be produced by an individual working independently," and contrasts the individuality of the Renaissance unfavorably with that of the Middle Ages, calling it "capricious and irresponsible."

The Italian Renaissance architects worked like painters rather than constructors. Their use of the "Orders" is rarely based on any structural need. "Columns and pilasters, answering to nothing in the real structure, are disposed with no thought save for agreeable lines and rhythmical spacings." Renaissance architecture became "a mere surface architecture, differing fundamentally from all of the great architectural systems of ancient times and of the Middle Ages." The only wholly consistent and distinctive styles in Europe were the Greek, Byzantine and Gothic. The Introduction closes with laudation of Italian painting, which, unlike architecture, was not governed by a consciously retrospective motive. The Renaissance architecture of Italy was the product of one of those "periods of partial aberration" through which peoples sometimes pass. "The noblest forms of art are not an outgrowth of such conditions."

Ruskin's entire system of criticism of art, including architecture, is based, as every reader of his works well knows, on moral values primarily. In one of his Edinburgh lectures on painting, for instance, after portraying the complete subservience of medieval art to religion, he asserts that after 1500 "men had, for the most part, to paint the lives of Bacchus and Venus," and that art, forsaking the primary purpose of moral teaching, placed beauty first, truth second. "The doom of the arts," he tells us, went forth from the Camera della Segnatura, in which Raphael "elevated the creations of fancy on one wall to the same rank as the object of faith upon the other." In another lecture he deplores the destruction of medieval art by the Renaissance builders and their satellites, who "overthrew more than half" of the noblest monuments in Italy and France, in order to put up "Greek" porticoes and palaces in their stead. The whole Renaissance architecture he calls *accursed* "with deliberate purpose," closing the second lecture with a magnificent outburst of vituperative eloquence, unmatched elsewhere in the literature of architectural criticism, denunciatory of all the sinful and abominable works of that "Greek" architecture, as well as of its miserable modern

imitations. In an earlier lecture he declares that "these pediments and stylobates and architraves never excited a single pleasurable feeling in you—never will, to the end of time. They are evermore dead, lifeless and useless in art as in poetry." He is speaking, it is true, of modern buildings, but he is continually lumping the modern and the Renaissance architecture in one lump of denunciation, and his objection is not to the modern, as distinct from the Renaissance "pediments, stylobates and architraves," but to these features wherever found, in contrast to the Gothic spires and gables.

It was Fergusson who first, or at least most systematically, found fault with Renaissance architecture as a mere copying of old forms instead of an invention of new forms, and therefore insincere and false in its fundamental system.

In the Introduction to his "History of Modern Architecture," first published in 1862, he calls the styles described in the previous volumes (those on ancient and medieval architecture) "The True Styles." "Those," he continues, "that remain to be examined may in like manner be designated the Copying or Imitative Styles of Architectural Art." "All the buildings belonging to the first class were without one single exception arranged solely for the purpose of meeting in the most direct manner the wants of those for whom they were designed, and the ornamentation that was applied to them either grew naturally out of the construction or was such as was best suited to express the uses or objects to which the building was to be applied." "There is a purposelike truthfulness about them which can never fail to be pleasing." But on the other hand: "It is perhaps not too much to say that no perfectly truthful architectural building has been erected in Europe since the Reformation. . . . In modern designs there is always an effort to reproduce the style of some foreign country or that of some bygone age, frequently both." On another page he remarks that the architects of Italy in the Renaissance tried to divert attention from those domestic details of their palaces "which no art can hide and no taste can dignify" by "placarding their buildings with the porticoes and details of the Templar architecture of the Romans," and by so doing "degraded the borrowed features . . . without elevating the building whose deficiencies they thought they might thus be able to conceal." Their use of pilasters "gave a character of unreality to the style, and betrayed that continual striving after imitative forms which is its bane and fatal to anything like truthfulness of effect."

Again on page 29, after observing that the richness and grace of the Corinthian entablature and the strength and appropriateness of simpler orders have never yet been equaled, he continues: "It is no wonder, therefore, that details so perfectly appropriate were seized on with avidity by the architects of that day, which happened also to be just the time when the taste for Classical Literature was reviving and men were eagerly affecting whatever reminded them of Rome and its greatness.

"Having adapted the cornices to mark their floors, it was hardly possible they could avoid introducing the Classical pillars which formed a part of the order. This was done timidly at first and as mere ornaments, and, had the imitation remained there, no great harm would have been done; but it was a step in the wrong direction; it was employing ornament for mere ornament's sake, without reference to construction or the actual purpose of the building; and once it was admitted that any class of ornament could be employed other than to express—while it beautified—the prosaic exigencies of the design, there was an end of all that is truthful or that can lead to perfection in architectural art."

And on page 31: "The fact that since the revival of ancient learning all architects have been composing in a dead language is another point so important that it cannot be too strongly insisted on here. It not only has been the guiding principle of every design, but is the foundation of every criticism we utter."

I have quoted thus at considerable length from Ruskin, Moore and Fergusson as being the three most distinguished and widely read critics of the school we are dealing with. Others have written

more or less in the same strain. There were, for instance, the two Pugins, father and son, whose fervid assaults upon all neo-classic architecture as pagan, as well as non-British, surpassed, if possible, Ruskin's writings in vituperative and satirical bitterness, not in literary eloquence. Mr. Ralph Adams Cram has on several occasions, in books and lectures, exalted the medieval culture and its art in contrast with those of the Renaissance, which, indeed, he tells us in one of his Scammon lectures, has bequeathed us a civilization but not a culture. Nearly all his references to the Renaissance are depreciatory. Mr. Sturgis, on the other hand, is apologetic and exculpatory in his attitude; he finds occasion to praise, *but*——. He is cold to neo-classic architecture; more sympathetic to the early phases of the Renaissance. And the minor critics, in considerable numbers, have followed these leaders, unquestioning of their sweeping characterizations, their mistaken and unfair emphases, their distortions of fact and their unverified premises.

Briefly to rehearse again the substance of these criticisms, they set forth that:

1. The entire movement of the Renaissance was a revolt against Faith and Discipline. Securing liberty of individual thought, it rejected moral and religious constraint, and ushered in an age of immorality, license, selfishness and luxury. Its art, therefore, reflecting this decay of control, is immoral, insincere, pretentious and false.

2. The new paganism that resulted fed, and was fed by, a new cult of classical literature and art, and this led in architecture to an affectation of the antique, to the effort to revive the ancient forms and emblems and ornaments, so that it substituted imitation for natural and logical development.

3. Thus architecture became a false art, producing works that sought to copy ancient buildings or that were decked out in the apparel of ancient buildings—an apparel that was expressive neither of the purpose and functions of the building nor of its construction.

4. The use of the classic Orders became more and more the final resource of designers, until it was almost a mania, controlled by archeological canons rather than by the designer's imagination and the requirements of the particular problem.

5. Structural forms were thus used as mere ornaments, having no part in the actual construction.

What gives this indictment its force and its wide acceptance is the fund of truth underlying it. Sweeping condemnations not based upon any substratum of fact soon lose their force and are forgotten. It is not to be supposed that men of the intellectual distinction and moral fervor of the critics we have quoted could be so blind as intentionally to ignore facts or so insincere and unjust as to suppress or distort them consciously. Is their judgment, then, just? Is there good reason to assert its general correctness? Admitting their sincerity and their intelligence, are we to credit them with unerring judicial fairness both in their presentation of facts and in their reasoning from them?

Those who would answer these questions in the negative allege an evident hostile animus in all the writings now under review; an animus which, however cautiously expressed, should at once put the reader on his guard. The criticisms above quoted, and others like them, read too much like special pleadings. Esthetic criticism, if it would command acceptance, must be free from bias; its verdicts should be pronounced in the light of all the pertinent considerations both for and against. The simile of the law court is not wholly applicable; or we might change its application and say that the art critic who would command acceptance must first play the part of the impartial judge who sums up the pros and cons, and then of the jury who pronounce the verdict upon that summing up; while the art-loving public constitutes the final court of appeals in the case. When a critic acts as a special pleader, as the advocate of a one-sided view of the subject, he compels even those who have hitherto looked impartially on both sides to bring forth the arguments and the evidence which contradict or offset those he has advanced on his side.

Now the men whom I have quoted and

their followers seem all of them to have been brought up and to have developed their critical faculties, such as they are, in an atmosphere of medievalism. In the cases of Ruskin and Fergusson we have not merely the influence of the medievalistic revival of the second and third quarters of the last century, but also that of revolt against the degraded estate of contemporary architecture in that period. This, as a sequence of the Renaissance, was confounded with it, as we have seen. Mr. Russell Sturgis and Mr. Cram represent two generations of Americans whose architectural inspiration has been for the most part English and Gothic. Professor Moore's has been French and Gothic. In a previous article I have tried to explain the error of the attitude which cannot recognize with equal freedom the merits of two distinct kinds of design, proceeding from different points of view, under differing conditions, to different goals, and this incapacity appears in all the criticisms of the kind under discussion.

When, therefore, of two great periods of the world's thought and artistic activity, one is always and at every point disparaged in comparison with the other, and particularly when it is the later period that is so disparaged, to the denial of the supposable progress of the race, it is fair to inquire whether there may not be misplaced emphasis in the comparison made. Such, I think, will be found to be the case. Unconsciously, or consciously, the writer's predilections move him to emphasize all the merits and advantages of one side and all the defects of the other; palliating the faults of the first and minimizing the excellences of the second. This is done in all sincerity by enthusiasts like Ruskin and R. A. Cram, by scholars like Moore and Porter, by architects like Fergusson and Sturgis. The concentration of their studies for years upon medieval architecture makes it difficult for them to judge fairly an architecture of a totally different kind. They make the mistake of judging it by the same criteria, from the same point of view, as the architecture which has been their particular study previously.

So when they charge Renaissance architecture with the sins of a revolt against Faith and Discipline and Religion, several questions at once occur. Is it not true that this revolt was inevitable, given the corruption and decay of Faith and true spiritual religion in the fifteenth century? If so, does not the fault lie back of the revolt in the system and age that made it inevitable? Was not that revolt a protest of liberty, and was not its consequence that freedom of the mind and soul which has made all progress possible? Of course, if one believes and insists (as some do assert) that the medieval life and ideals and conduct and system were really to be preferred to intellectual freedom and religious liberty, nothing more can be said. The whole history of five hundred years should be wiped out, and the world restored to feudalism, serfdom, the Holy Roman Empire, the temporal authority of the See of Rome over the western Christian world, the poverty, pestilences and miseries and superstitions of the thirteenth century.

If, however, the world was to shake off the abuses and evils of that age, this could only come by a mighty transformation that would, because a human movement, bring with it its own excesses and abuses. So has humanity always advanced. So are we now passing through a cataclysm which is to change the face of the earth, and establish democracy and human rights above might and brute power. It is another phase of the same struggle, of which the Renaissance, with all its errors, and the French Revolution, with its horrors, and our Civil War have marked three distinct stages. With each struggle mankind, though maimed and bleeding, has emerged upon a higher level and won a little nearer its still far-off goal of perfection.

The Middle Age, with its monastic system, its feudalism, its slowly crystallizing states, and its dream of a universal Church and a universal Empire, both enthroned at Rome, did its work and played its part in the drama of human progress, and then was driven from the stage. The Renaissance blundered its way toward liberty and progress, and then made way for the age of individualistic industrialism and physical science, which also has done its work and gone down in ruin to

make way in turn for something higher and better. The Cathedral was the consummate expression of the first; the Palace and Town Hall and State House and Court House and broad-streeted cities were the manifold expressions of the more manifold life of the second; the factory, railway station and sky-scraper of the third. It is futile and unreasonable to find fault with the architecture of one age for not expressing its own spirit by the same means and according to the same standards as that of a preceding age.

But, say the objectors, the Renaissance inaugurated an age of neo-paganism, and its architecture is throughout permeated by the pagan spirit, the pagan emblems and the pagan forms.

We may demur again to this whole line of criticism as irrelevant to a fair and proper appraisal of architectural art. But, for the moment waiving the demurrer, we may reply, Yankee-fashion, by asking, "Well, what if"——? We are not to be frightened by words! Great are words, doubtless, and many a writer and many a reader have been swayed by the magic of words when the actualities for which they stood would not have stirred a fibre of their emotions. What was this "neo-paganism" which so excites the horror of the critics? Surely not the actual restoration of the worship of the dead deities of Olympus! When Milton invokes the Heavenly Muse, and Botticelli portrays a Venus, and Raphael the myth of Psyche, what does it mean but that these names and forms were for them symbols of things which belong to all ages, or suggestions recalling beautiful myths that embodied poetical imaginings about nature and the soul? In so far as the pagan spirit of the Renaissance connoted moral lawlessness, sensuality and the rejection of spiritual constraint, it was reprehensible; but that evil side of it has been much exaggerated. Luxury, immorality and self-indulgence did not begin, nor religion perish, with the Renaissance. And the evil of its reaction was, after all, the reverse side of that protestation which won for humanity the priceless gift of its own liberation and opened to the soul and mind new doors and new avenues of progress previously barred by ecclesiastical narrowness and political tyranny.

The revival of classic studies was not the cause of the Renaissance, but one of its accompaniments. That revival began long before the Renaissance itself. Revival and Renaissance were alike the result of a deep and broad tide of feeling, the craving for freer thought and fuller self-expression with a new and growing sense of the beauty of nature and the nobility of humanity.

Edward Lewis, in the *Atlantic* for August, expresses so clearly and forcibly the real meaning and content of what is called the pagan spirit, that I take the liberty of quoting passages from it at some length.

"The word 'revival'," he says, "conceals a snare. The prefix is apt to mislead. In ordinary speech the term is used of bringing an old thing back again, as, for example, the revival of a play, or of a fashion. But in the flux of Life there can be no such thing as 'back again.' The answer to our 'encore,' even if it be the same song, is always different, if only for the fact that we have already heard it once. Nothing recurs. . . . There can be no revival in the sense of the restoration of the same identical fact. . . . Whatever it is which is to be revived, it must have suffered change by having been excluded for the time being; the second circumstance, also, must vary from the first; it will therefore be subject to a twofold modification. Life proceeds in a spiral, it does not move in a circle. History climbs. . . . Ourselves also have changed . . . and hence a further modification, since what we see is largely determined by what we are." . . .

"In brief, revival is a phenomenon which appears within the general circumstance of progress. Progress is constant. . . . Some sweeps of the spiral may be long and flat, others shorter and steeper, so that the same degree of progress may, at one time, be registered in a single generation of extraordinary spiritual illumination and impulse, which at another time of dimmer vision and less potent inspiration may require an age. Life proceeds irregularly. Nature does make leaps. But the upward movement is continuous and universal."

Then, noting that the "new paganism" is not the restoration of the "half-goat Pan," the author contends that "the modern view of life is profounder and truer than the ancient." The "pagan spirit" is *not* the antithesis of the Christ-spirit, but a conception of life necessary to the supplementing of the traditional, conventional Christian conception. "To look for the revival of the pagan spirit after two thousand years of Christian discipline is as legitimate, and withal as exhilarating, as to look for a renewal of one's youth in middle life." The essential spirit of paganism he conceives to be "the spirit of yea-saying and of joy in life, in contrast with that nay-saying which is so conspicuous in Christian practice, and with that promise of joy in after-life which is central to the Christian gospel."

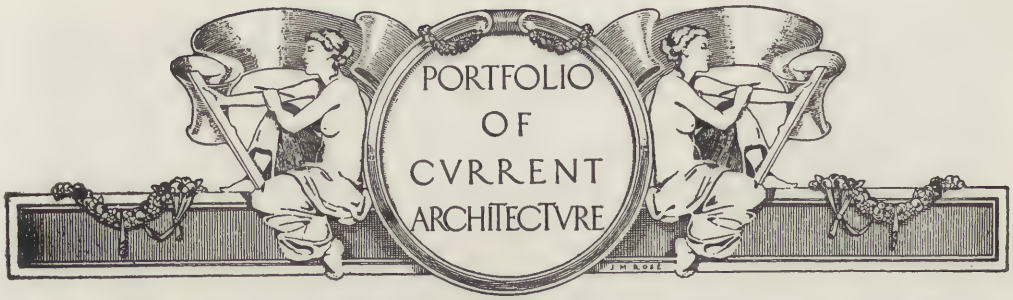
In other words, the pagan spirit, which is the Renaissance revival, is the spirit which recognizes the world and the life in which we now live, and uses and enjoys them to the full; not as an antithesis to and destroyer of the Christian hope in the life to come, but (if rightly cultivated and apprehended) as its complement and even its ally. Neither spirit alone is sufficient for the full realization of our natures and capacities: in the greatest natures they are conjoined. If the Humanists erred in one direction, the Church of the Middle Ages erred in the other. Precisely because it so erred, because it so exalted discipline and "nay-saying" above all else, the reaction was bound to come. To many of us it seems that Life and Art have been immeasurably the gainers thereby.

All ages are ages of transition. The glory of the cathedrals is great, and is their own; but they are the superb monuments of an age forever gone, one which could not possibly continue, nor possibly be restored. It is futile dreaming to imagine the rearing of their like in any other age, and wrong-headed criticism to make them or their system of design the norm by which to judge the architecture of the Renaissance or of any other period.

The charges of imitation and falseness, of sham and insincerity, to which I shall give incidental attention in my next paper, in connection with the question of the orders and classic detail, seem to have made far more impression than was their desert. They rest largely upon that same confusion of moral with esthetic values which constitutes the fundamental error in Ruskin's critical system. They illustrate strikingly that misleading magic of words which is at the root of nearly all forms of sophistry. Substitute a forcible word for a tame idea, and the trick is done! To impute moral delinquencies and repellent vices to works of architecture may be magnificent, but it is not criticism. Architecture is neither moral nor immoral, neither virtuous nor vicious. It may be the work of immoral men or of saints; it makes no difference of which, unless the designer's morals in some way affect his design esthetically for good or ill. It is by no means proved nor provable that they will so affect it. The eloquent and emphatic assertion of such an effect does not prove it. The claim that the alleged paganism and immorality of the Renaissance imply a debased, meretricious, esthetically inferior architecture must be argued upon the lines of esthetic criticism, not of ethics. Calm esthetic judgments, architectural and practical considerations, questions of planning, construction, decoration, expression of purpose, appropriateness—these are the proper things to discuss.

In every esthetic appreciation there enters an element of intellectual judgment. While beauty exists for its own sake and is its own justification, its enjoyment is greatly enhanced by the intellectual satisfaction derived from fitness, reasonableness, expressiveness, appropriateness. It is correspondingly diminished by absurdities, incongruities, commonplaceness and contradictions between function and expression. Herein lies the true field of extra-esthetic criticism. It is the misuse and exaggeration of factors in this field that have led to the bugaboos of misapplied ethics to which I have called attention.

I hope in another paper to discuss the Renaissance use of Classic forms, and the reasonableness of the Renaissance system and point of view in architecture.





MANTEL—RESIDENCE OF M. TAYLOR PYNE, JR., ESQ., NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT FOR ALTERATION.



ENTRANCE DOOR—RESIDENCE OF M. TAYLOR PYNE, JR., ESQ., NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT FOR ALTERATION.



RESIDENCE OF M. TAYLOR PYNE, JR., ESQ., NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT FOR ALTERATION.



A CORNER IN THE RECEPTION ROOM—RESIDENCE OF M. TAYLOR PYNE, JR., ESQ., NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT FOR ALTERATION.



ENTRANCE HALL—RESIDENCE OF M. TAYLOR PYNE, JR., ESQ., NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT FOR ALTERATION.



MANTEL IN RECEPTION ROOM—RESIDENCE OF M. TAYLOR PYNE, JR., ESQ., NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT FOR ALTERATION.



RECEPTION ROOM—RESIDENCE OF M. TAYLOR PYNE, JR., ESQ.,
NEW YORK CITY. R. C. GILDERSLEEVE, ARCHITECT.



PROF. SCHEVILL'S "KARL BITTER"

By PETER B. WIGHT

WHEN the great buildings of the World's Columbian Exposition, Chicago, were approaching completion in 1893, Karl Bitter first became known to the architectural world as a man not only of great technical skill, but endowed with an imagination which enabled him to cover the most important of the buildings with a complete scheme of architectural sculpture in full collaboration and sympathy with one of our greatest architects, Richard M. Hunt. No description of this work is now possible, for it was all destroyed with the building, of which it was the most important part, in less than a year after its creation. It lingers only as a fleeting vision in the minds of those who were privileged to see it; days of careful study would hardly have sufficed to enable one to follow the steps in the allegory which was presented on the four sides and on all the rising stages of the Administration Building. The only attempt to describe it in the biography just issued by Ferdinand Schevill* is the following mention of its subject and purpose: " . . . The building, fairly swathed, one may say, in sculpture, constituted one of the most unified and rhythmic elements of the whole Exposition. If this was decorative sculpture, it was also more than that, as the figures were not merely ornamental, but directly functional. Doubtless it was this circumstance that drew the attention of professional observers. *Decorative* sculpture was a thing that flourished everywhere throughout the Exposition ground, but here was *architectural* sculpture, and it may be asserted that this branch of the glyptic art made nowhere a more convincing demonstration of its power than in the Administration Building. . . . The great groups, though functioning primarily as architecture, were also planned to unfold a significance of their own. They told the tale of man's progress from savagery to civilization. There, for example, was Fire Uncontrolled contrasted with a group representing Fire Controlled, and so on through the remaining elements of Water, Air and Earth. They showed thought and fancy, these various com-

*Karl Bitter. A Biography, by Ferdinand Schevill. 4to, pp. 68, pl. 41. The University of Chicago Press. $2 net. Weight 2 lbs., 6 oz. Issued under the auspices of the National Sculpture Society.

positions, but the thought and fancy had their root in the exuberance of youth rather than the ordered reflection of a profound philosophy; and Bitter himself was wholly pleased when his groups, after making a brave show through a summer season, were 'scrapped' together with the other seven day wonders of the brilliant White City."

Probably I had as good opportunity as any other person to study Bitter's scheme for illustrating a wonderfully comprehensive subject, given in hundreds of groups and figures, many of them of colossal size to suit the scale of the building. I remember thinking that it would be a profitless undertaking amid the hurly-burly that constantly characterized the locality to try to decipher the meaning of the artist, but my interest was arrested by the harmony and unity of scale between all the details of architecture and of sculpture. Here was an *ensemble* such as I never before had seen, and to which there was no parallel in the examples of the work of the ablest sculptors and architects of this country displayed on the Exposition grounds. It was a pity the Administration Building could not be preserved. Happily the structure was destroyed by fire just before the house wreckers would have torn it down and possibly condemned some of its sculptural beauties to slow death in ignoble places. It was valuable—and it is worth talking about now—as demonstrating the possibility in modern design of the complete unity of architecture and sculpture.

The Administration Building, in collaboration with Richard M. Hunt, was Bitter's only work at the Columbian Exposition. It was not his first experience in architectural sculpture. He had previously modeled the bronze doors for Trinity Church, New York, which, however, were not executed until after the Fair. When the commission to design the Administration Building came to Hunt—it came from seven other architects, who had decided that he should have the best of the eight buildings which were shared between them—he consulted with Bitter about the sculpture before the design was made. Bitter had for about two years been modeling architectural decoration for some of the very expensive private residences at New York and Newport which Hunt had designed. In fact, Hunt had "discovered" Bitter. That part of the story is admirably told by Professor Schevill; Hunt had first found him working as a journeyman modeler and carver in a marble yard which was doing some work for him. It was by Hunt that he was afterward introduced to George B. Post, through whose office he eventually received commissions for two of the pediments of the Wisconsin State Capitol Building. He was also commended to Frank Furness, of Philadelphia, who commissioned him to do all the sculpture for the Pennsylvania Railroad at its Broad Street station. Thus all his early work was done through association with architects, and the amount of it was wonderful in its extent. But this is not the place to recount it all or to repeat what Professor Schevill has so aptly said about it. It is sufficient to note that he became the leading architectural sculptor of America during the time from his first acquaintance with Hunt to his untimely death in 1915. His last work was on the model for the figure which surmounts the fountain on the Plaza at the southeast entrance to Central Park, designed by Thomas Hastings.

Bitter was well prepared for the technical work of a sculptor by his studies and experience in the city of his birth, Vienna. He was born of a bourgeois family, who were shopkeepers in that city. He obstinately refused the guidance of his parents for his future occupation, and ran away from school to study drawing, modeling and marble cutting. Yet he continued his studies in everything that might prepare him for his life as an artist. He thus became a skilled modeler and craftsman in the cutting of stone. This was interrupted only by his service in the army, which he resented by desertion after he had served one year. With practically nothing in his pocket and a pack on his back, which contained his heavy tools, he found a friend in Berlin who assisted him to go to Bremen, where he set sail on a steamer to New York.

There he landed on November 22, 1889, with his pack and tools and nothing more in his pocket than enough to enable him to pass the immigrant inspection, in the twenty-second year of his age; and he could not speak a word of English. How he got a job in a marble yard is graphically told by the author, who long knew him intimately, for he became his brother-in-law. It was only two and a half years later that he began modeling for the work on the Administration Building. He was then twenty-five years of age.

Bitter not only had to learn to speak and read English, but in course of time became a well-read scholar in history and literature, especially that of his adopted country. He was inspired by the free life of America, and patriotism became his religion. Probably few men ever lived who so rapidly experienced the life of a free and independent people.

One of the greatest compliments ever bestowed upon him was the fact that during the last years of his life the Emperor Francis Joseph performed the unusual act of pardoning him from his conviction as a deserter and made it possible for him to visit his native country and city.

The book before me contains forty-one half tone illustrations, each printed on a separate sheet, including two likenesses of the sculptor, two pen drawings, and one view of his house at Weehawken, N. J. Among the illustrations of architectural work are two of the Trinity doors; one pediment from the Pennsylvania Railroad Station; two ornamental groups for Biltmore, N. C.; one statue on the Metropolitan Museum, N. Y.; part of the Dewey Arch, N. Y.; one panel from the Louisiana Purchase group on the monument at St. Louis; caryatids at First National Bank, Cleveland; one pediment for the Capitol at Madison, Wis.; and one view of Depew Fountain, Indianapolis, Ind.

Of monuments and memorials there are: One of Dr. Pepper, Philadelphia; one of the Hubbard Memorial, Montpelier, Vt.; two of the Villard Memorial, Sleepy Hollow, N. Y.; the Ogden Tablet, N. Y.; the Herron Tablet, Indianapolis; Gen. Siegel's Equestrian Statue, Riverside Drive, N. Y.; three views of Schurz Monument, Morningside Park, N. Y.; one of the Alexander Hamilton Statue, Cleveland, O.; one of Thomas Jefferson, Charlottesville, Va.; one of the Dr. Angell Memorial, Ann Arbor, Mich.; two of the Frehn Memorial, Passaic, N. J.; one of the Kasson Memorial, Utica, N. Y.; and the figure for the Plaza Fountain, New York City.

I have not dwelt upon the important events of his life and the honors that were bestowed upon him by his appointment as Director of Sculpture at the succeeding national exhibitions during his life; he was honored by his confreres by being twice chosen as President of the National Sculpture Society, which office he held at the time of his death. He will be mainly remembered from the fact that he gave architectural sculpture a name and a place in the United States.

BOOKS ON COLONIAL ARCHITECTURE

By RICHARD F. BACH

Curator, School of Architecture, Columbia University

Part VII.—Photographs

A SURVEY of the field of dealers in photographs of buildings, details and objects of the minor arts dating from Colonial times brings the information that no less than ten firms and individuals have found it profitable to handle on a large scale photographic reproductions of the art of so restricted a region as the original Revolutionary territory. Of these, four have made a distinct and highly developed specialty of Colonial architecture and its accessories. It is no small tribute to the workmanship of the Colonies that their products, architectural and otherwise, should be of a quality to foster an interest warranting so extensive a business. Of the dealers listed at the end of this brief note, only a few, as indicated by asterisks below, cater specifically to the needs of architect and student in the field. These make a specialty of obtaining the proper angle of vision, and the requisite accuracy of line and shadow, of selecting pregnant details, suggestive motives; in fact, it is fascinating at times to note the wealth of suggestion contained in a single well chosen interior, however simple, or the particular mode of posing the camera adopted in order to fix a certain conception of carved detail or of nicely proportioned mouldings. Of the others it may be said that their reproductions are of a popular character, of good quality and not lacking in historical and inspirational value, suitable for collateral study in connection with a history of literature, but not of sufficient precision to make them useful to the practitioner in designing his details. This criticism should not, however, apply to the views of entire structures, which for the study of mass composition, site, etc., are thoroughly available to the architect's purposes. In the appended list, prices and sizes as given by the dealers themselves have been included. It should be understood that the Architectural Record can assume no responsibility as to the statements on these points printed below, the figures being given as a matter of convenience only. Under Subjects: in each case are given only those of present interest in these papers.

Dealers in Photographs of Colonial Architecture.

*Allen, Misses Frances and Mary, Deerfield, Mass. Subjects: houses and details, general New England, but chiefly in and about Deerfield. Sizes: 4 x 5 up to 11 x 14 inches, chiefly 5 x 8 and 6½ x 8½ inches. Style: platinum prints, black or sepia, glossy prints at request. Prices: 25 cents up to $2.75 each. Will send prints on approval for selection to architects and students of architecture. Catalog on request. Photographs of excellent quality; unmounted but on heavy paper.

*Cousins, Frank, 335 Essex Street, Salem, Mass. Subjects: excellent material, gauged from the architect's viewpoint and covering chiefly the New England field; newer additions have been made also in the New York and Philadelphia, and the old Pennsylvania Dutch region. Well selected and carefully photographed details, woodwork, metal work, mantels, etc. Mr. Cousins himself is an authority on Salem Colonial work in particular and, with Phil Riley published *The Woodcarver of Salem*, a detailed study of William MacIntyre, which was reviewed at length in these pages in the May issue. Sizes: chiefly 8 x 10 inches. Price: $0.50 each. No catalog.

Elson Art Publication Company, School St., Belmont, Mass., or 2A Park St., Boston, Mass. Subjects: limited number of items in the Colonial field. Sizes: average 5 x 8 inches for prints; larger for photographs. Styles: half tones on stiff paper, may be used unmounted: photographs better mounted. Prices: from 15 cents each up to 40 cents each. Catalog on request.

*Halliday Historic Photograph Company (C. Park Pressey), 8 Beacon St., Boston, Mass. Subjects: good collection of New England buildings, including photographic reproductions of prints antedating photography. Sizes: 5 x 7 inches up to 8 x 10 inches. Styles: platinum finish; also glossy prints; may be filed unmounted. Prices: 50 cents each. Catalog on request.

*Northend, Mary Harrod, 12 Lynde St., Salem, Mass. Subjects: wide range of Colonial material, entire buildings, interiors, details, etc., in the New England area. Valuable for the architect and of excellent quality. Sizes: 5 x 7 inches and 8 x 10 inches. Prices: one and two dollars each. Reductions to architects and architectural students. Catalog in preparation. Will send photographs on approval for selection. Miss Northend is a well-known writer in the Colonial field; she has appeared regularly in current periodicals and has produced the following, all of which have been reviewed in this department of THE ARCHITECTURAL RECORD: *Historic Homes of New England; Colonial Homes and Their Furnishings; Remodeled Farm Houses.*

Perry Picture Company, Malden, Mass. Subjects: large collection but only a limited number in the Colonial field. Style: cheap reproductions of negligible value to the architect, except for forming historical collections; carbons, half tones and special processes. Sizes: 5½ x 7¾ inches up to 10 x 12 inches. Prices: from one and one-half cents each up to five cents each. Catalog on request.

University Travel Association, 11 Boyd St., Newton, Mass. Subjects: very limited number in Colonial field. Sizes: 4 x 6 inches. Styles: half tone, stiff paper; may be filed unmounted. Good for historical collections, but not sufficiently distinct for drafting table use. Prices: one cent each. Catalogs sent on receipt of five cents.

U. P. C. Book Company (American Architect), 243 West 39th Street, New York City. Subjects: general views and details; also furniture and some minor arts; also measured drawings. Sizes: 8 x 12 inches and some slightly smaller. Styles: half tone and zinc line; unmounted.

PORTER'S "LOMBARD ARCHITECTURE"

By A. D. F. HAMLIN

THE publication by the Yale University Press of Volumes I and III of A. Kingsley Porter's *Lombard Architecture* completes a work of which the two earlier volumes, noticed in the Architectural Record for May, foreshadowed the signal importance. As thus completed, Mr. Porter's treatise constitutes the most notable contribution thus far made by American scholarship to the archeology of art, and perhaps the most important addition to the literature of medieval architecture made anywhere since Viollet-le-Duc produced his *Dictionnaire raisonné de l'architecture française*. It certainly is unrivaled in its own field. This is not to disparage the splendid pioneer work of De Dartein and the compendious and learned volumes of Rivoira; but Mr. Porter has both cleared the foundations laid by them and their predecessors of certain errors and misconceptions revealed by his own later and more exact investigations, and built upon those foundations an imposing structure of his own, more comprehensive, more detailed and more thorough than anything that has gone before, using in the structure the most carefully selected materials, thoroughly tested at every point.

The plan of the work was explained in the May Architectural Record. Of the new Volume III it is not necessary to speak in detail, as it is constructed on the same plan as Volume II, noticed in May. It treats of 134 Lombard monuments in towns whose names come alphabetically from Mizzole to Volterra, inclusive. Modena, Novara, Parma, Pavia, Piacenza and Verona are some of the most important centres among these; but there are included also a number of places and monuments little known even to scholars and not at all to tourists, in which Mr. Porter has discovered facts and features of capital importance for the history of Lombard development; such, for instance, as Sannazaro Sesia, where occur fragments of what he be-

lieves to be the earliest of all medieval groin-ribbed vaults.

In Volume I the author attempts a synthesis of the facts and developments revealed by the investigations so minutely detailed in the 1,256 pages of Volumes II and III, and copiously illustrated in the 244 plates of the portfolio—Volume IV. In some eighty chapters or sections grouped in four "Parts" (Structure, Ornament, Accessory Arts, Iconography), subdivided into Books, he discusses a multitude of topics, such as the Master Builders, compound piers, transverse arches, vaulting, roofs and campaniles, ornament, capitals, carving, sculpture, painting, and the like. Nothing escapes his careful study; the extent of his reading and the minuteness of his observation are alike extraordinary; and to attempt any valid criticism of his conclusions would necessitate, in most cases at least, long and minute study and personal investigation of the monuments. One may, of course, contend that he disposes too easily of the common assumption that the *magistri comacini* were really an organized society hailing from Como; and that his suggestion that *comacini* is a corruption of *collegini* is more ingenious than convincing. One may pick an occasional flaw in his reasoning, as in that relating to the final abandonment of ribbed groin vaulting and the return to the domical groin vault without diagonal ribs. It is doubtless a slip of the pen that allows to one double-bay of a six-part vault only seven instead of nine ribs (three transverse, four longitudinal and two diagonal ribs), as against the eleven ribs of the corresponding two bays of oblong vaulting; but these are minor matters, of little or no importance in comparison with the vast amount of precise and detailed information in the volume. The inferiority of the work of the tenth century to that of the eighth is asserted, against the usual belief that the eighth marked the lowest level of medieval architecture; we are told that there were few campaniles before 1000 A. D.; that the earliest pointed arches were not due to Cistercian influence; that in the twelfth century vaulting was generally given up in favor of timber roofs, although previously it had been the scarcity of timber that gave rise to ribbed vaulting, and the change is attributed to the collapse of many vaults, owing to inadequate abutment and overloading; and a hundred other facts of the greatest interest are set forth, always with the *documents à l'appui.* This topical treatment breaks up, of course, the historical sequence of the study, and the one feature we miss is a final summing up, in concise form, of the entire onward progress of Lombard architecture from the Carlovingian to the Gothic period. To the architect doubtless the most interesting chapters will be those of Part IV, on Iconography, which present the Mirror of Nature, the Mirror of Science, the Mirror of Morals, and the Mirror of History; showing how the legends and superstitions and strange imaginings and interpretations of Life, Nature and God, of the North Italian medieval mind, are reflected in carved and painted scenes and symbols in these crumbling but fascinating monuments of Lombardy.

Porter's *Lombard Architecture* is not a work for the entertainment of one's slipper-hours before the open fire in the library. It is a work of reference, a huge repository of erudite research, the astonishing product of less than ten years' work by a man still in his early thirties, and an indispensable foundation for all future study and discussion of its subject.



Henry Vaughan—An Appreciation.

In the passing away of Henry Vaughan a great silent force has gone out of American architecture. A man who said nothing, but did much. Of his seventy-two years of life thirty-six were spent in America. Always busy, but never rushed, the casual observer may wonder why more of his work is not better known. But, true artist that he was, he cared little whether it was known or not, so long as it was well done, and he was as conscientious and painstaking in designing a hundred-dollar gravestone to go in a country churchyard as in the design of a city church which would be seen by all.

His work was always his own—as little as possible was entrusted to draughtsmen; even many of the full-size details were drawn by his own hands.

That he did not identify himself with the architectural societies of which he was a member was not due to a lack of interest in the welfare of the profession nor to any unsociability upon his part, but to the love of his own work and the knowledge of the fact that a man can only do a certain amount no matter how hard and steadily he may work.

Mr. Vaughan was, as the great majority of the profession know, an Englishman by birth, a student of Sir Gilbert Scott and for some years head draughtsman in the office of Messrs. Bodley and Garner. He came to America in 1881, and can be said to have been the real interpreter of Gothic architecture in America. To be sure, Upjohn, Renwick, Haight and Ware had been trying to do Gothic work, but Gothic architecture had never been a living reality in this country until Henry Vaughan began his work, which may have been equaled, but will never be surpassed. To make the assertion that his influence and the inspiration given by his work have made possible the very high class of Gothic work done by his contemporaries is not making too great a claim for him.

To give a list of the work of Mr. Vaughan would be impossible, as during his entire career he was steadily employed, aside from the work of designing of buildings, in the designing of altars, screens, choir stalls, memorial tablets, communion services, altar crosses and candlesticks, which were scattered all over the country, to say nothing of a great number of gravestones which are in many parts of New England. His most important works were: St. Paul's School Chapel, Concord; Chapel for Groton School, Groton, Mass.; Christ Church, New Haven, Conn.; Chapel and Parish House, Church of the Incarnation, New York; Church of the Mediator, King's Bridge, New York City; Church of the Redeemer, Chestnut Hills, Mass.; Stone Memorial Chapel, Western Reserve University, Cleveland, Ohio; the Potter, Huntington and Bowdoin Chapels, in the Cathedral of St. John the Divine, New York, and the Cathedral of St. Alban at Washington, D. C., now in process of construction; also a number of school and college buildings and some residential work.

No tribute to Henry Vaughan the man and the artist would be complete without a word on Henry Vaughan the man of God. He was a Christian and a churchman of the truest and best type, devoid of cant and hypocrisy, who walked humbly with his God and delighted in doing good. His charities were always done quietly and without publicity, never letting his left hand know what his right hand did. He was one of the gentlest and kindest of natures, loved all the lesser creatures, condemned hunting because it took life, and at one time had all the sparrows in Pemberton Square, where he had his offices, coming to his office to be fed.

Such was Henry Vaughan—man, artist and Christian.

DAVID B. EMERSON.

Philadelphia House Architecture.

Philadelphia stands preeminent in American house architecture. In fact, we may begin to ask the question whether Philadelphia architecture is not the most vital art development in this country today. While discerning spirits have searched feverishly in music, in painting, and in other arts, minutely examining the work of each new individual in the hope of discovering some evidences of a rising native school, in the Pennsylvania city a group of architects, working sincerely and without ostentation, have come far along the road towards the cherished goal.

The more one studies the Philadelphia school the more attributes does one find in it of an enduring success. Principally, it suffers less than any other from that overwrought individualism which is the burden of modern art. In Philadelphia, our strongest impression is somehow that the work of the community as a whole is greater than that of any individual; whereas in New York, with all the excellent work accomplished there, we do not have this feeling with anything like the same distinctness—there architecture appears as the unrelated work of individuals, many of them men of exceptional ability. Nor is this difference between the two cities due to lack of men of strong individuality in Philadelphia, for, as we all know, the latter city has furnished her full quota among the brilliant leaders of the profession.

To test the truth of her architectural excellence one need only motor through the suburbs of Philadelphia. There one will be astonished at the rare unity of architectural effect of nearly all the houses, small as well as large, grounds as well as houses; and one will note that they harmonize remarkably, appearing as parts of a whole community, similar to those communities we are wont to admire in England. The small houses compare well with the large ones, and the works of less known architects stand up well beside their more prominent fellows. Suburbs elsewhere in this country are, the best of them, a jumble of houses of all styles and degrees of excellence. Nor is there anything imitative about all this. Philadelphia suburbs have the open aspect of neighborliness, the expansive porches and large sun-welcoming windows, the cheerful touches of white painted wood that indicate the American temperament—all in contrast to the walled privacy, the more sombre colors and the toy-like scale which are essentially Britannic. It is true that there is some English influence in Philadelphia architecture. This is not strange when one considers that Philadelphia has remained Anglo-Saxon and that many of her architects have English leanings. Mr. Frank Miles Day received some of his early training in London offices, and Mr. Eyre's sympathy with English work, especially in interiors, is well known. These overseas influences do not, however, in the least weaken the American character of Ardmore, of Rosemont, of Haverford, for they follow, either literally or in spirit, early American architecture, Georgian or Colonial, of which splendid models are found in the Philadelphia countryside, and which has come down to them in an almost unbroken tradition to the present day.

To discover the secret of the Philadelphia school we should know more of Philadelphia itself. If its architecture is superior to that of other American cities, it is because Philadelphia civilization is in some respects superior and is certainly more clearly defined than the civilization of other cities. An old community, it is in a district of great industrial resources and rich farm lands, where the ideal of fine homes and comfortable living has been cherished for generations without interruption. New England, with her harsh climate and barren soil, with her Puritan ancestry, turned more to intellectual and literary traditions; while Philadelphia, to whom nature has appeared in a softer mood, has preferred the cultivation of urbanity, of manners, of the art of living in its more material phases. The Quaker City instinctively perceived the fallacy of "plain living and high thinking." In this cult of the home in Philadelphia nothing has been neglected. Nowhere is good cooking so well appreciated as there. Even the strict Quakers of two generations ago could not resist the delights of dining and those of their more worldly neighbors still living will tell you with amusement that people liked to visit the homes of the Friends, since the best tables in Philadelphia were to be found in them.

One might multiply these incidents indefinitely. They point to an existence of a community art—that is, an instinctive appreciation of an art product and a demand for such, on the part of those termed "clients," who in the course of several generations have succeeded in arriving at such unanimity of art-opinion that it stamps

itself more or less strongly on the work of individual artists. As a proof of the strength of her tradition, Philadelphia was never engulfed in Victorianism as were nearly all other English-speaking communities. While elsewhere brownstone horrors were built, Philadelphia still clung to the simplest, post-"Colonial" type of house, and even in the seventies lined her streets with those severely plain three-story, flat-roofed brick houses of small panes, of white marble lintels and sills, and white marble steps that housewives caused to be scrubbed so industriously. Monotonous and uninspiring they were, but they were in good taste and scale and they served to keep the chain of heritage from breaking.

It is as if Philadelphia, while the rest of the world stumbled in the mud of nineteenth century confusion, had at least the grit to stick to her own. If she was somewhat bewildered and had lost her impulse, at least she would not rot away.

The contemporary twentieth century work is far superior to its mid-Victorian predecessors in the esthetic virtues, yet it retains the same honest directness which at times points to that inevitableness that is the eternal in art. Though firm in tradition, it carries no burden of formulae nor of bookishness. Free and supple in expressing conditions, it allows plenty of play to the individual and to the vivacity of modern Americanism. This is a fourth excellence to be added to the other three, of community expression, strong tradition, and honesty.

Perhaps these conditions explain an odd fact, which is, that Philadelphia architects may occasionally make mistakes of scale or proportion without somehow much impairing their work. What they do is apt to have a character and rightness that is innate and which is too superior to be harmed by a few errors. A striking proof of this is to be found "somewhere in New Jersey," where in a small town two buildings similar in size and purpose stand near together on the same street. One is the work of a well-known New York firm; the other of Philadelphia architects. The New Yorker's building is faultless, in fine scale, exquisitely drawn and detailed. The Philadelphian's building is not so "knowing" in its details; on a drawing it looks commonplace, even slightly clumsy, and the interior has three slightly different scales in the large entrance hall and main stairs. Yet, seen in place, the honors all go to the latter. It is splendid in character, in surety of design, in color, and in that unconscious good breeding that affords more than anything else supreme good style. The New York work is fine architecture; the Philadelphia one is fine art.

John Taylor Boyd, Jr.

The Architectural Record

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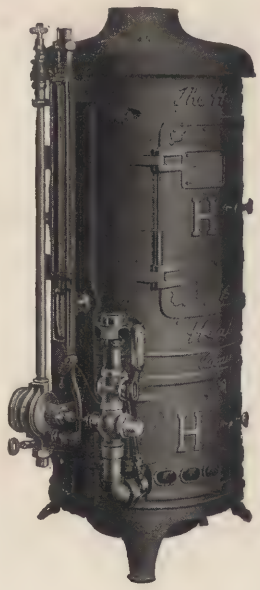
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THE ARCHITECTVRAL RECORD

VOLVME XLII NVMBER IV

OCTOBER, 1917

The American Country House

By A. D. F. Hamlin

THE Editor of the Architectural Record has asked me to write the entire text of this issue. It is a good deal to undertake, and I ask the reader's indulgence for all deficiencies in the effort to discharge the task. I have been supplied with many more photographs than I could use, and the omission of many examples offered by the architects who designed them is due, not to failure to recognize their merit, but to lack of space for so many illustrations. The selection, both of plans and views, has been made with an eye to the illustration of particular features or ideas and not on the basis exclusively of abstract architectural merit. A few of the illustrations in the text are from former issues of the Architectural Record.

As the Architectural Record is read by many men and women who are not architects, those readers who are in the profession will, I am sure, be willing to excuse the statement of many things which are obvious and commonplace to them, but not so to the layman.

The text is divided into three parts, treating respectively of the genesis of the American country house, the country house plan, and types in recent country house design. In choosing examples for illustration, preference was given, whenever opportunity offered, to houses of moderate cost.

There are many more illustrations than are specifically referred to in the text. Those not so referred to are arranged by subjects, exterior views being grouped together, entrance halls forming a second group, and so on, a method of arrangement that makes for ease of topical comparison, although it has the disadvantage of separating the illustrations dealing with any given building. To minimize this disadvantage, numerous cross references are given under the illustrations.

The Genesis of the American Country House

IT is about three hundred years since Francis Bacon—courtier, philosopher and essayist—in his famous essay "Of Houses" (which so many have heard of and so few have read), painted an interesting word-picture of the ideal country house of the English gentleman of his time. Reading that essay one recognizes how persistent are the factors of good house design that underlie all changes of time and style. Making due allowance for differences of detail, the model country house or manor of the Elizabethan and Jacobean periods in England offers types of plan and mass which many a wealthy American of the twentieth century has been glad to have his architect follow (Fig. 1). For after all, aside from changes in methods of heating and lighting and transportation, the chief alterations brought by the centuries to the building of houses are social changes. The plan of the Roman villa was arranged with reference to the services of hundreds of slaves and to dependence as far as possible on favorable exposures for light and heat. The English gentleman, living in a colder climate, necessitating multitudinous fireplaces and steep roofs, commanded the service of a large but limited number of paid servants; hence the more compact plan built in two or three stories, with high roofs, gables and chimneys. In the American country house there is smaller provision for the housing of servants, because these are fewer than for the corresponding type in England, while labor-saving conveniences are more numerous and efficient. The English keep their doors closed; we like to keep ours open and on occasion to "throw the ground-floor rooms into one." The "living room," piazza and sleeping-porch are peculiarly American. With scantier domestic service than prevails in England, the convenience of ample closets for all bedrooms becomes more important, and bathrooms are multiplied. The traditional portable tin bathtub, with cans of hot and cold water brought each morning by serviceable menials, ministers to many an Englishman's sense of established rank. He prefers thus to be served by a host of inferiors rather than by pipes and apparatus operated by his own hand.

Social custom and domestic service, heating and lighting within the house, and climate and materials without—these are the controlling factors in the genesis and development of domestic architecture in general and in any given place and period. In the matter of architectural style, the country house has, of course, always been subject to the style-forming influences of its time, but less impressionably than civic or religious architecture. The more modest the scale and pretension of the house, the more has it felt the influence of local and individual traditions and tastes. Oftentimes, for this reason, the cottage and the house of moderate cost are more interesting than the splendid mansions of noblemen and millionaires.

Francis Bacon (I must get back to my text for once at least) was still living when Raleigh's colonists first settled at Jamestown and when (1607) the first New Englanders landed at Pemaquid, Maine, thirteen years before the Mayflower dropped anchor at Plymouth. The Jacobean style prevailed in England, for Inigo Jones was still a young man and Wren was not yet born. But no Jacobean mansions rose on the shores of New England or Virginia. Log cabins and a strenuous fight with Nature and savages must be the colonists' portion for generations before fine houses



FIG. 1.—AMERICAN ADAPTATION OF ENGLISH ELIZABETHAN—HOUSE OF M. E. DICKINSON, KANSAS CITY, MO.
J. Van Brunt, Architect.

of wood, stone or brick could arise in the wild Western land. Forests must be hewn down, roads be built, commerce and trade be developed before luxury or splendor could appear. That is why the earliest reflection of the prevalent style of the motherland was not of Jacobean but of Georgian models. Previous to (say) 1725, the exiguous resources of the colonists, the abundance of timber and the scarcity of stone, or at least of capable stonemasons, had compelled the development of interesting types of wooden houses, of which a few examples still remain—clapboarded or shingled, gambrel-roofed, sometimes with an overhanging upper story adorned with hewn pendants. (Fig. 2.) Even the brick houses of the James River tobacco-planters were of the simplest architecture, until growing wealth, in the eighteenth century, permitted more ambitious architectural efforts.

These early developments in house-design constitute the most characteristically and exclusively American phase—or style, if you please—of our national architecture, owing less than any later phase to foreign traditions; at least until the eighties of the last century, to which I shall ask attention on another page.

Many European critics have failed to apprehend the true philosophy of a Colonial civilization and art. Here was the first instance in modern history of the establishment on a virgin and savage soil of communities of highly civilized immigrants, bringing with them ideals, customs, traditions, which they sought to replant in a new and wild environment.* Not all these seeds of culture could spring up under these alien conditions; some came up in new and strangely transformed guise; some, like the ideals of civil liberty and democracy, flourished as never before. The architecture of the home-land could not be

*For a historic parallel one must go back to the Dorian occupation of Southern Italy and Sicily. When, centuries after the first migration, the Greek colonists began to erect monumental buildings, they reproduced textually the Doric style of the home-land.



FIG. 2.—CAPEN HOUSE, TOPSFIELD, MASS., ABOUT 1665.

reproduced. The materials, the resources, the domestic service, the social conditions of the mother country were wanting. The new society was absolutely democratic, the climate severe. The first necessity was the cutting down of the forests, to provide at once land for tillage and wood for fuel and building. It was a race of carpenters that grew up, not of stonemasons. Except in a few localities, where abundance of clay or easily worked stone compelled the use of those materials, wood became our national building material and shingles took the place of tiles and slate. A severe winter climate dictated low ceilings and compact plans, and in New England and parts of New Jersey the gambrel roof provided an additional story at little cost. The interior was devoid of other ornament than simple wainscot in white pine and an equally simple mantelpiece.

Some of these early features persist to the present day. The gambrel roof (Fig. 3), clapboards and shingles for siding, and the double-hung instead of the casement window have come to us from the seventeenth century. The compact planning of our smaller houses, the multiplication of closets and cupboards and the persistence of sizable fireplaces for wood are also inheritances from the pre-Georgian period. In England the scarcity of wood fuel has compelled the general giving up of the wood fireplace and the general adoption of the small open-grate fireplace for soft coal.

These simple wooden houses were the rational product of the new conditions under which the Colonial culture, brought from the old homes, expressed itself in new forms, seeking to reproduce the substance of the old life as best it could, and thereby creating unconsciously a new culture in the new home.

II.

When, however, the primitive conditions of the earlier colonization had disappeared and a measure of wealth and material prosperity had developed out of them, the influence of the arts of the motherland began to make itself felt. From her they drew all they could afford of the material embellishments of



FIG. 3.—HOUSE OF HARRY H. HANCOCK, BEACH BLUFF, SWAMPSCOTT, MASS.
Peare & Quiner, Architects.

life and reproduced as much of its outward semblance as they had skill and means to imitate. Maritime commerce—what Mrs. Hodgson-Burnett has called "the shuttle" between the Old and New Worlds—was linking together the arts and life of motherland and colonies. Thus began the second stage of our Colonial culture, that of the eighteenth century, the age of Queen Anne, William and Mary and the first three Georges in England. In this stage the arts began to flourish, partly by direct importation from England, partly by close imitation of English forms, furniture and dress, partly by the modification of English products under the pressure of new conditions both economic and social. We can imagine the bluff-bowed ships of the eighteenth century bringing over not only brocades and broadcloths, mahogany furniture and silver and china, but also twisted stair-balusters of mahogany, and carved moldings and mantelpieces, and pattern-books for the carpenter-architects. There would be now more call than formerly for skilled artisans in woodwork to emigrate to the new country, and for native apprentices to learn the finer art that was becoming fashionable. Thus a native American house art grew up, based on the Georgian in its details, but fitted to the simpler life and wooden construction of the North, or the more aristocratic slave-owning plantation life of the South, where brick was abundant and cheap, and where the warmer climate demanded the shade and shelter of wide verandas or "galleries" in one or two stories. Our house types of the eighteenth century, though reflecting the English influence, as was natural and proper, were peculiarly and wholly American.

We of today have learned to know our Colonial types fairly well; they have been abundantly documented and reproduced. Their dignity, refinement and charm are best appreciated by those who have tried in their own practice to reproduce these qualities (Fig. 4). With my present limitations of space it would be superfluous to rehearse the general



FIG. 4.—HOUSE OF Z. MARSHAL CRANE, DALTON, MASS.
Harding & Seaver, Architects.

features of these types: they are familiarly known to architects and to many discriminating clients. The modern revival of the style, well shown in the illustrations in this issue, is justified by the merits of the eighteenth century work, both practical and artistic.*

With the close of the eighteenth and the beginning of the nineteenth century began the period of the classic revival of which Thomas Jefferson, as Professor Fiske Kimball has shown, was one of the most enthusiastic promoters, if not the pioneer. French influence replaced the English to a considerable degree for a while after the Revolution; while the development of civic architecture in the new State capitals and growing cities led to a more severe and monumental treatment of house architecture, at least in the larger and richer types. The smaller houses continued to be built on the simple and unpretending lines of the earlier age.

Then came—in the thirties and forties—the Greek movement, which produced not a few charming houses as well as many white pine cottage travesties of the Parthenon and Theseum. To this date belong the greater part of the Ionic porticoes, reaching through two stories, of the Northern cities: a type not unknown in the late eighteenth century, though at that time of Roman rather than Greek type. Domestic architecture became more artificial, affected, sophisticated, lacking the naïve charm of the Georgian houses. Artistic taste had begun to decline with the growth of industrialism due to railways and steam manufacture. The railway and steamer and steam sawmill killed the individuality of hand-labor and local methods. The ordinary house became a plain or ugly rectangular, gabled box, without

*I cannot understand Mr. P. B. Wight's depreciation of the "discovery" of the "so-called Colonial style" expressed in his interesting article in the Architectural Record for October, 1915. He regards it as a check to the architectural progress of the revival of 1881-1891, and implies that an objection to it lies in the fact that in this neo-Colonial movement the architects are "influenced by the educated dilettanti among their clients." To most of us this would appear to be evidence of improving taste among the laymen, and the movement to be thus not a professional affectation, but a genuine national development.



FIG. 5.—A STONE STABLE OF 1865, AT GERMANTOWN, PHILADELPHIA, ALTERED AND INCORPORATED IN THE HOUSE OF ALFRED MELLOR (Figs 86 and 93).

charm; and the jig-saw and band-saw dealt the final blow to good taste. The carefully working local house carpenter of the old type disappeared and the architect had not yet taken his place. Books of designs for Italian villas, Gothic cottages and stables (Fig. 5) and English manors provided the exterior designs and sometimes the plans for ambitious house-builder-owners, and the mills supplied the windows, doors, trim, turned piazza-posts, moldings and jig-sawed cornice-brackets and piazza details.

The plan was without charm, as was the detail. The hall was narrow, the stairs straight, the chimneypieces monuments of ugliness in slate or marble; black walnut supplied the acme of splendor for interior finish, and the plaster ceilings and cornices were frightful atrocities, commercially produced by foreign workmen. So matters went through the Civil War period, which came to a close in the late seventies with the domination of the "fashionable" mansard roof and the supremacy of commercial millwork decoration; and thus ended the darkest period of American domestic architecture.

The beginning of the present-day era of house design may be dated from 1876 or 1880, as one pleases. We all know that shortly after the Centennial Exhibition at Philadelphia in 1876 there began a forward movement in taste and in the arts in the United States, which has continued to the present time through a variety of phases. By 1880 the various forces and influences that were to remake American taste had begun to influence architecture, in house design as well as in civil and monumental and ecclesiastical buildings. Mr. H. H. Richardson was establishing the vogue of his very personal interpretation of the Romanesque of Southern France, which he employed with amazing cleverness in both city and country residences (Fig. 6). Scores of imitators tried to equal his picturesque and powerful creations with varying success. At the same time a group of designers, among whom McKim, Mead and White



FIG. 6.—HOUSE OF FRANKLIN McVEIGH, CHICAGO.
H. H. Richardson, Architect.

were the most prominent exemplars in New York, were developing an equally new type of design in shingled cottages with ample piazzas and irregular roof masses over studiedly irregular plans. (Fig. 7.) The plan of this sort of design was sound enough, though the results varied from a charming simplicity to the most extravagantly affected promiscuity of detail and effect. The fundamentals of this phase, which lasted from 1880 or 1882 until about 1895,* were the frank expression externally of the plan; the shaping of the plan to meet the special requirements of the family life, with no effort after formal symmetry; the enlargement of the entrance hall with its stairs into a living hall with fireplace; the provision of abundant piazzas, bay-windows and "nooks" of various kinds; the use of shingles, both plain and cut, clapboards and (rarely) half-timber, stucco, or even brick or stone in the walls. The dominant note was the pursuit of the "picturesque," and the style, although it bore not the remotest resemblance to anything English, was popularly dubbed "Queen Anne."

We smile today at some of these houses of the eighties, but they were comfortable houses, planned from the inside out—a tremendous advance on previous ideas. They were sincere efforts to produce rational and artistic dwellings, and they formed a new and praiseworthy chapter in our house design, purely American, and as such were admired and praised by foreign writers of that time and by the late Montgomery Schuyler in his "American Architecture," published in 1893.

Contemporary with this development another most important movement was gathering strength—the Colonial Revival. I can well remember the early indifference of most of us old-timers

*Mr. P. B. Wight claims Chicago as the birthplace, or at least the "home," of the great revival of 1881-1891. Undoubtedly it was one of its homes; but surely Boston, with H. H. Richardson, was another, and New York, with McKim, Mead, White, Post, Babb and Cook, was another, and Minneapolis still another. It had many homes, and first appeared in the East quite as notably as in the Middle West.



FIG. 7.—A "QUEEN ANNE HOUSE."
Reproduced from C. M. Price's "Practical Book of Architecture," published by J. B. Lippincott Co.

toward the enthusiasm of the pioneer students of our pre-Revolution architecture and our gradual awakening to its interest and charm. During the late eighties and the nineties books with measured drawings and photographs were multiplied on the subject; local interest was aroused in the important centres of that architecture, and both owners and architects, in increasing numbers, turned to Colonial models, especially for the larger and more ambitious types of country residences. The art of gardening began to receive attention. Our architects were better educated, their draftsmen better trained than formerly, thanks to Paris and the American schools. Houses were better planned, better detailed, with more artistic interiors to meet the requirements of an improved public taste. English models began to reappear, and Elizabethan and Jacobean houses of great size and splendor, with terraces and gardens inspired from English exemplars, began to divide honors with those of Colonial type.

Thus strangely, yet naturally, has it come about, through the growing intercourse with the motherland, through the constant weaving of "the shuttle" across the ocean, by which now the two lands and peoples are bound together in a common warfare for common ideals of freedom and democracy—thus has it come about that the architecture of Francis Bacon's time has at last found recognized descendants on this side the Atlantic. Or, to change the metaphor, the old English tree has dropped its later seeds where they could be borne across the seas and find a congenial soil in which to spring up into a new American life. The shingled cottage with gambrel roof, the Colonial mansion, the Jacobean country house in its American guise, are each typical products of the composite internationalism and intense Americanism of our twentieth century culture.

The Country House Plan

THE name "country house" covers a pretty wide range of architectural conceptions, from the modest bungalow or village cottage to the lordly "manor house" or "country seat," so-called, of the multimillionaire. This, at least, is the broad and loose American usage. In England the term is more generally confined to large residences on extensive estates in the country, occupied during that considerable part of the year when the owners prefer not to live in town. To most of us it means any house in the country, large or small, and may even include free-standing suburban residences such as the Londoner sometimes calls "detached villas," or houses of like character in the more open parts of our smaller cities; as, for instance, the twin houses from Evanston, Ill., in Fig. 8.

In discussing the country house plan, therefore, it will be necessary to distinguish between the cottage of the small householder, whose family do their own work or at most employ but one servant; the more expensive house built for the well-to-do family with a number of servants; and the villa, country seat or palace (or whatever one chooses to call it) of the very wealthy, in which cost is a minor consideration, and which provides every luxury that wealth, refined taste and social eminence can demand.

Wide as are the differences between these three classes, there are in their plans so many common elements that one might almost say that they differ chiefly in the number, size and splendor of their constituent parts than in the essentials of those parts.

The cottage of the bank clerk or school teacher contains in embryo the principal elements of the mansion or villa. Entrance porch, piazza, vestibule. hall, stairs, parlor or living room, dining room, kitchen, pantry, sleeping rooms and bathroom—these one finds alike in the cottage and the palace. (Fig 9.) The attic room, back stairs and rear entry and porch of many a small house are but the simpler form of the service wing of the mansion. The rich man has a breakfast room as well as a dining room, a scullery as well as a pantry, a music room and library and sun room as well as a parlor, and many bedrooms and bathrooms, a nursery, a "den," a sewing room, linen room and store rooms; but these are after all mere expansions and reduplications of the parts of the small house. The service court, with laundry and stables and carriage houses and garage is an extension and elaboration of the humbler householder's back yard, toolhouse and $96 garage; for the cottager now has his car, and the $7,500 limousine of the millionaire does for him little more than the $450 "flivver" for his shop clerk neighbor.

The plan of the costly Jacobean or Colonial country seat is thus an outgrowth and expansion of the plan of the simple village house.

Leaving out of account, for the present, the bungalow (which in spite of its Oriental name is a distinctly American product), the characteristic features of the typical American small house plan may be summarized somewhat as follows: The ground floor comprises a vestibule, entrance, stair hall, a parlor, a drawing room, dining room, butler's pantry and kitchen, which serves also as a laundry, cellar stairs, two or three closets and sometimes a "back entry." Sometimes a library is added, and one or more bay-windows and a piazza are almost invariably features. Fireplaces and kitchen stove are so arranged as to require but one or two chimney stacks (Figs. 9 and 10).

On the second floor (the "first floor"



FIG. 8.—TWIN HOUSES AT EVANSTON, ILL.
Edgar Ovet Blake, Architect.

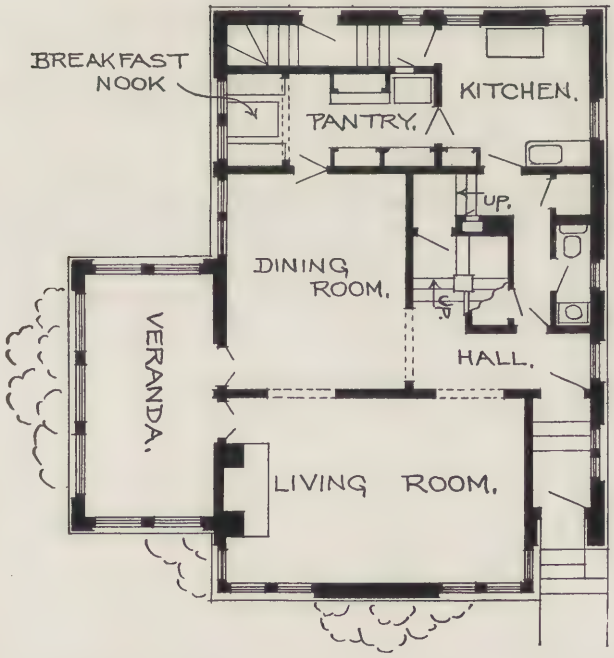


FIG. 9.—FIRST FLOOR PLAN OF HOUSE AT RIGHT IN PHOTOGRAPH.
Edgar Ovet Blake, Architect.

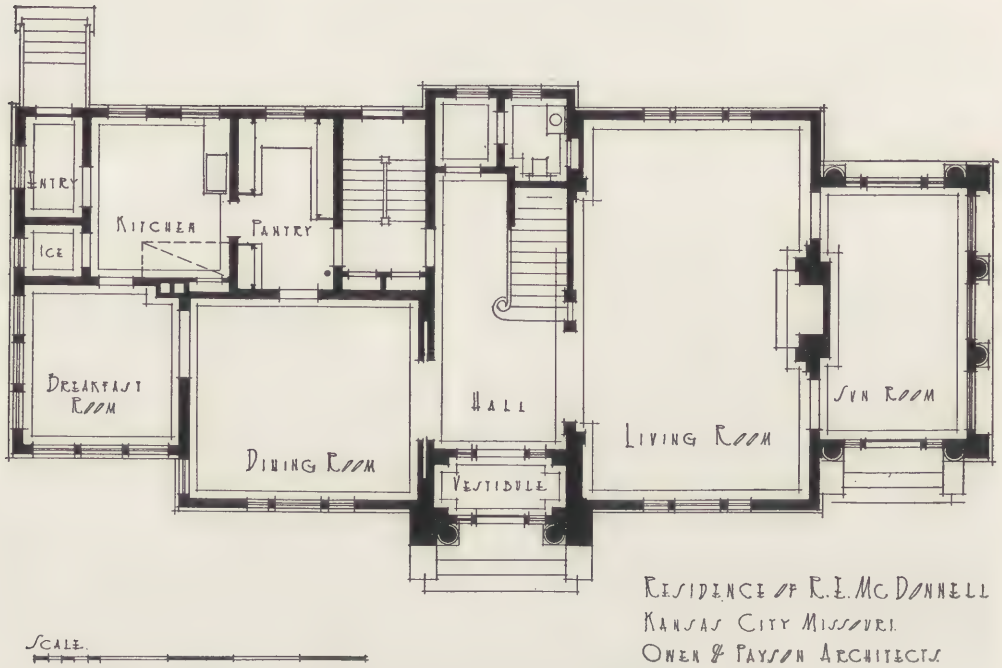


FIG. 10.—FIRST FLOOR PLAN—HOUSE OF R. E. McDONNELL, KANSAS CITY, MO.
Owen & Payson, Architects.

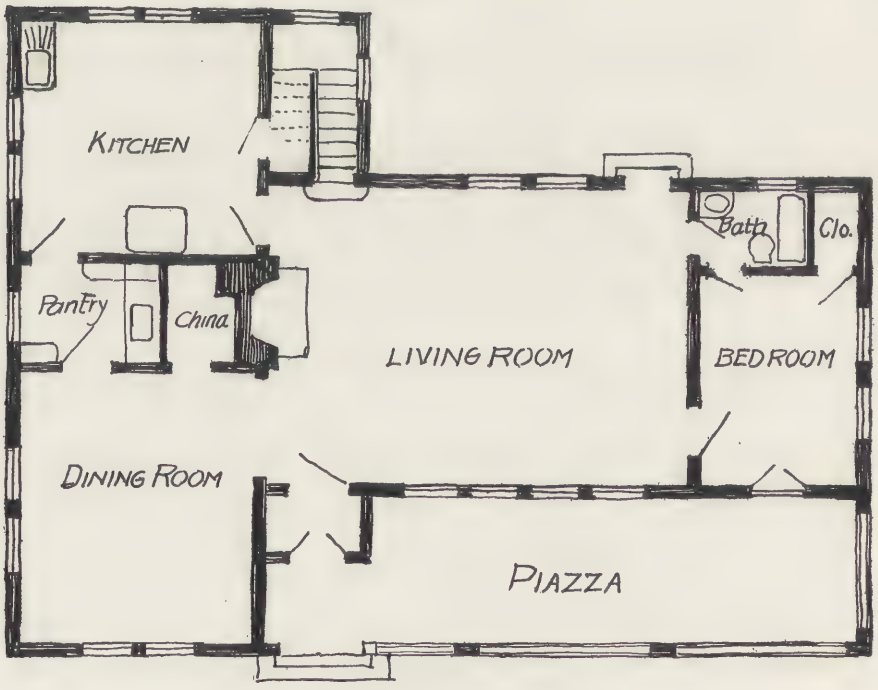


FIG. 11.—FLOOR PLAN OF A BUNGALOW.

in English parlance) are three or four bedrooms, each with an ample closet, and one or two bathrooms. A sewing room, linen closet, hall closets and back stairs are not uncommon. There may be fireplaces in some of the bedrooms; but the main dependence for heat is upon a hot-air, steam or hot-water furnace in the cellar, and electric lighting is now common even in out-of-the-way villages. There may be one or two rooms in a roof story or attic.

These arrangements, so familiar and obvious to us, are nevertheless in many respects different from those of English and other European houses of corresponding scale. What in these first of all strikes an American visitor abroad is their singular lack of closet room and of piazzas. The stair hall is rarely a habitable room, as in many American houses of only moderate size. Instead of the American "butler's pantry" there is usually a scullery beyond the kitchen, which last is often further from the dining room than would be tolerated here. The chamber floor differs from the American chiefly by lack of closets. The English separation of the water-closet from the bathroom is a good feature which might be oftener reproduced in our houses. The sleeping porch, now so common even in small houses here, is practically unknown there. The English love to keep their doors shut and care far less than we for vistas through the rooms downstairs, for large double doorways and the open planning which we prefer for social reasons. In the American small house there is more study of material comfort, of saving of labor and footsteps for those who do their own housework, by compact planning and by mechanical conveniences. The "bungalow" type (Fig. 11) carries these qualities to the furthest expression in its careful economy of space combined with openness. All the rooms, or all but one or two under the roof, are on the ground floor, where the "living room," dining room and stair hall are often combined in one spacious apartment, to the great saving of the housewife's footsteps and avoidance of slamming doors.

II.

In houses of the second class the process of elaboration of the small house plan has begun. The stair hall is larger, often extending through two stories; the stairs are more spacious and stately. The plan is less compact, more often strung out in length, sometimes with a wing at an angle with the front (Fig. 12). The outline is often irregular by reason of bay-windows, porches and projecting wings or bays. There are more adjuncts and dependencies: sun room, music room, library, "den" and billiard room. The servants have their own dining room and porch or piazza, sometimes a whole servants' wing. The piazzas are sometimes given great dignity, as in the illustration in Fig. 100. There are three or four rooms in the roof, and one or more sleeping porches are common (Fig. 13). Such a house is often provided with elaborate mechanical conveniences for lighting, heating, vacuum cleaning and refrigeration. The bathrooms are multiplied; the servants are, of course, given one, and the kitchen and its dependencies are greatly elaborated.

The plans of Colonial type are usually symmetrical in outline, at least in the main portion (Fig. 14); but irregular plans are otherwise the most frequent, worked out on lines of convenience and of prospect or exposure (Fig. 15). Expressing most freely, both in themselves and in the external masses which result, the particular tastes and requirements of the owner, they are apt to produce more interesting exteriors than those laid out on lines of formal symmetry (Fig. 16). That is why it is so much harder to make a house in the city, although set in fairly spacious grounds, as interesting as one of the same accommodations on a country estate. The formality of a street frontage and the necessity of a compact plan and more formal architecture leave the designer less free than when he is laying out a really rural plan. For suburban houses and those of like character on city streets the Colonial types are peculiarly suitable, but other styles are also appropriate. In the small country house the

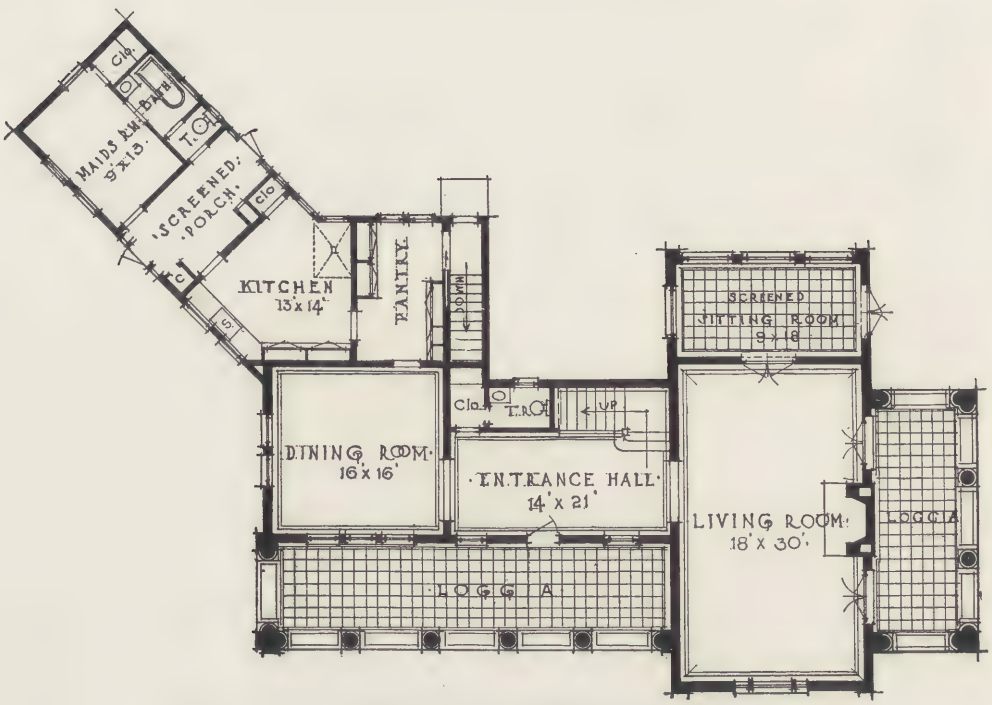


FIG. 12.—PLAN OF FIRST FLOOR—HOUSE AT ALTADENA, CAL.
Reginald D. Johnson, Architect.

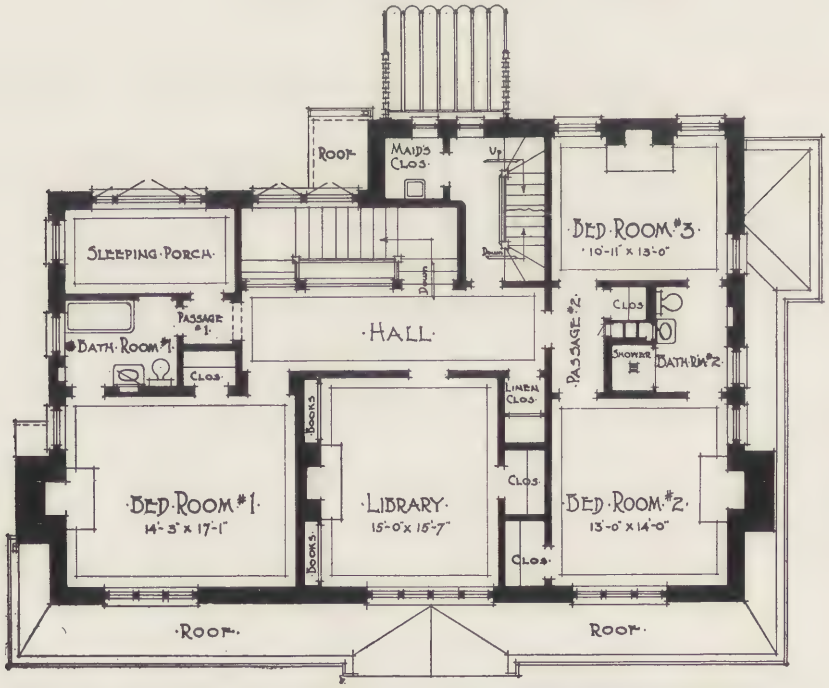


FIG. 13.—SECOND FLOOR PLAN—HOUSE OF THOMAS KENYON, PITTSBURGH, PA.
(Figs. 55 and 56.)
Alden & Harlow, Architects.

architect exercises his ingenuity and his artistic skill upon the often difficult problem of producing much out of little. Economy of cost and hence of space must be his constant preoccupation, and artistic effect must be sought with simple materials and scanty resources. Convenience and comfort are of more importance than vistas, and splendor is out of the question. It is quite possible for the architect to display, even in such hampering and unimportant problems, many of the higher qualities of his talent; but the wings of his imagination are clipped by the shears of cost-limit and modest dimensions.

III.

The "stately pleasure-house" of the wealthy client, on the other hand, is the architect's delight, quite apart from the prospect of the sizable commission to be earned. Planning the country seat of a millionaire, whether on the Pacific coast or among the hills of New Jersey or on the rocky and wooded shores of New England, is a congenial task. Two elements enter into the problem which are lacking in the smaller problems of house planning: stateliness of effect and an adequate landscape setting. The wings of the designer's artistic imagination may be spread to their fullest extent, borne up on the breezes of a propitious Fortune (the "million-airs," as one facetious architect dared to call them). Although the necessary elements of the plan are the same in the greater as in the lesser house—hall, stairs, living and dining rooms and rooms for sleeping—the designer can play with them as he cannot in the smaller problems. With a multitude of servants in the household, the necessity for economy of footsteps and of labor disappears. With conditions of ample space and cost, rooms can be made of any desired size and shape and fine vistas opened through them. (See Fig. 17.) Architectural style becomes an important question, since the conditions of isolation in the open landscape leave the owner and architect free to exercise their taste in an unhampered choice. Dignity and stateliness take the place of cosiness and economic simplicity, and interior vistas take on great importance. The entire plan must be adjusted to the particular site, and the adjoining grounds must be so laid out as to form an integral part of a harmonious

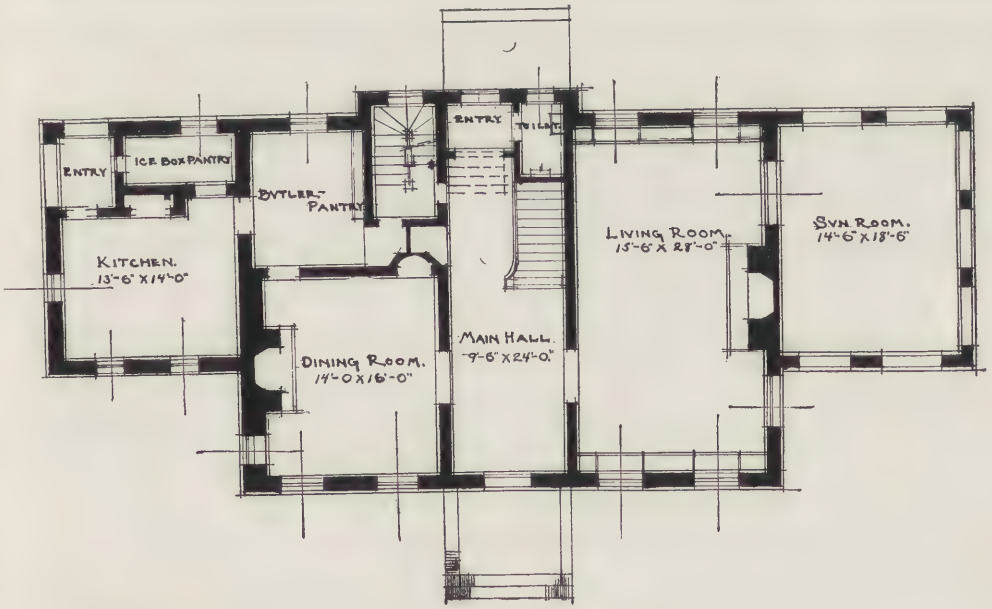


FIG. 14.—FIRST FLOOR PLAN—HOUSE OF J. K. SKINKER, ST. LOUIS, MO.
Guy Study, Architect.

design with the house itself as the controlling feature. (See an excellent example in the Architectural Record for October, 1915, by Delano and Aldrich for Miss E. A. Watson at White Plains, N. Y.)

The difficulty of the problem of the great house lies in the harmonizing of stateliness with domesticity. There are imposing palaces for royal and imperial display and grand entertainments; there are palatial hotels in which the casual or "transient" guest is surrounded with every luxury; but the country house is a house to be lived in. Its ample provision for guests and for social entertainment does not, or should not, detract from its air of comfort and what is commonly called "livableness." It may be the house of a collector of curios or of an art connoisseur, but it should not be designed like a museum. The client's tastes and aptitudes must often play a large part in deciding the relative importance of domesticity and display, but the skillful architect knows how to keep the client's demands well in hand and even make them minister to the conception he has himself formulated. I believe that, in spite of our American fondness for display, our architects have generally succeeded, fully as well as those of any country, in making the country houses of the wealthy pleasant to live in as well as beautiful to look upon.

Here, as in houses of the second category, one encounters both regular and irregular plans: the former especially prevailing in Colonial designs. One notes in recent works the increasing frequency of the solarium or sun room (see Fig. 14); and a tendency to long and narrow plans, giving a maximum of exposure in one direction. (See Fig. 15.) There seems to be a diminution

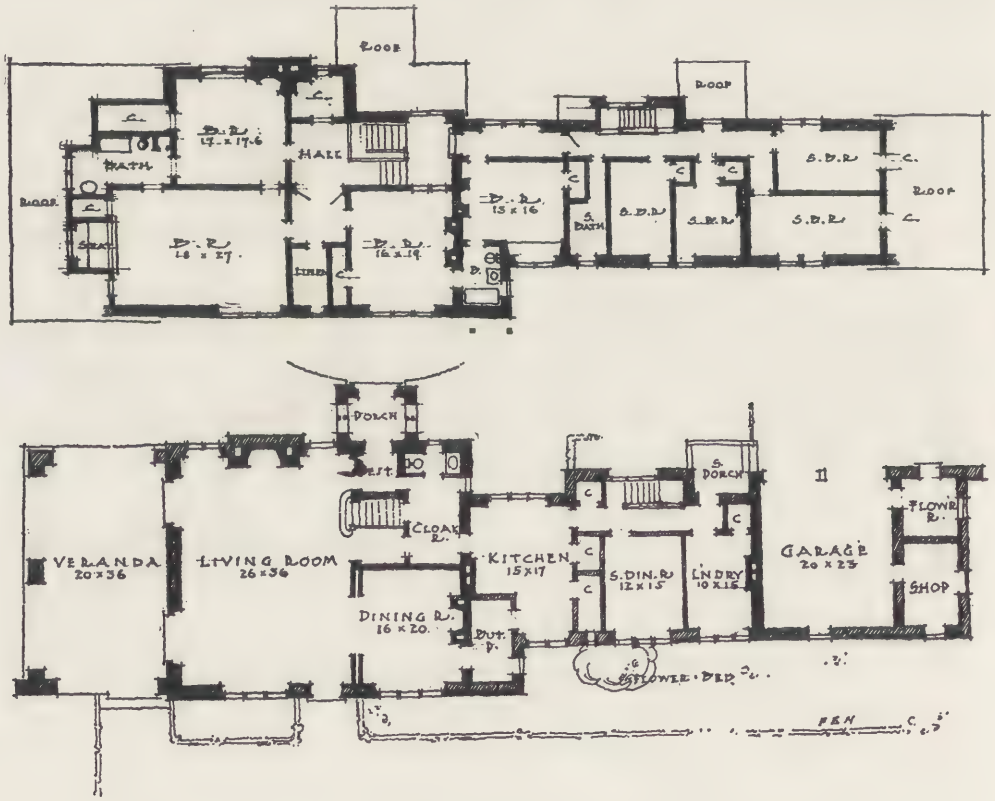


FIG. 15.—FIRST AND SECOND FLOOR PLANS—HOUSE OF E. W. RUSSELL, GREENWICH, CONN.
Frank E. Newman, Architect.



FIG. 16.—HOUSE OF E. W. RUSSELL, GREENWICH, CONN, FRANK E. NEWMAN, ARCHITECT.

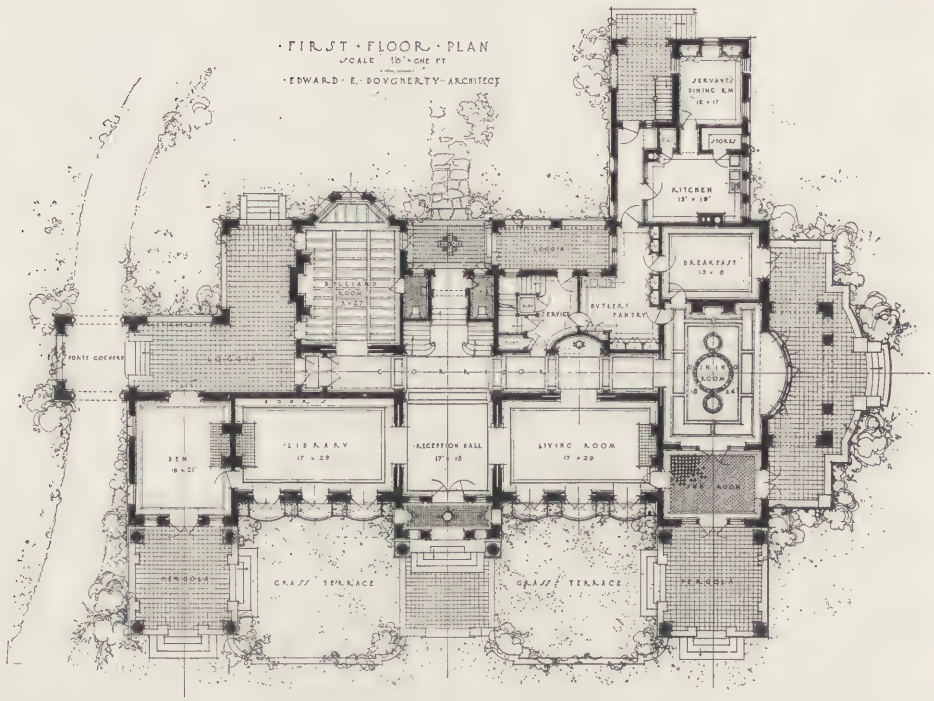


FIG. 17.—GROUND PLAN—HOUSE OF GEORGE ADAIR, DRUID HILLS, ATLANTA, GA. (Figs. 44, 90 and 97.) Edward E. Dougherty, Architect.

in the importance of the open piazza, its place being taken by unroofed terraces with awnings, by sun rooms, sleeping porches and the like. The servants' rooms form a complete wing, and there is quite commonly a service court, after the English fashion, surrounded on three sides by service dependencies and closed on the fourth by a wall and gate. The plans recognize distinctly an entrance front and a garden front, the former being often treated as the rear elevation on the same side as the service court, and the garden side as the real front. This produces the same result, though by reversed means, as the French arrangement of entrance court and service court at the front, and gardens and garden façade at what we should call the rear. (See again the plan Fig. 17.)

The American country house plan, large or small, modest or costly, has none of the obvious distinctiveness of the American office building or the American railway terminus, in which the peculiar exigencies of American business have permitted the evolution of types wholly different from anything European. The primary needs of civilized life are the same on both sides of the ocean, and it is chiefly in details that our every-day home life differs from that of our mother countries. But these differences are quite sufficient to occasion a distinctive domestic architecture in plan quite as truly as in exterior form. I believe an American house plan would be at once recognizable as such if erected in the United Kingdom or in South Africa.

Types in Recent Country House Design

THE passing of a year brings no measurable change in American country house architecture, and even in five years the changes, if any, are so slight as to require a pretty keen and discriminating observation to detect them. When, however, we take a longer view, and look back twenty or even ten years, we begin to detect the movement of the tendencies which are shaping the architecture of to-day and of tomorrow. Turn over the old files of your architectural periodicals to dates in the nineties and back to the eighties, and you will begin to realize the path over which we have traveled since then. Those of us whose hairs are gray or whose foreheads have expanded upward a long way toward the occiput—we who perpetrated some of the queer designs you there behold and were proud of them at the time—we have witnessed the steps of the onward progress since those early days and have even had a hand, with you our juniors, in promoting the advance.

I have in the preceding pages sketched briefly the evolution of our rural architecture and the main characteristics of our American house planning. It would take a volume to follow the minute stages by which the now-prevailing types of country house have been evolved. I shall not attempt it, but shall content myself with noting a few of these types and something of the influences which have brought them into being.

The illustrations with which I have been provided cannot, of course, be expected to present to view all the varied types to be met with throughout our broad national domain, but they cover a fairly comprehensive range as to location, material and style. The Atlantic coast and the Pacific slope, the Middle West, the Middle States and the South are all represented, though not so fully in some cases as one might wish. There are large and small houses; houses of wood, brick and stone, and stuccoed houses. There are picturesque shingled houses, Colonial houses of various types, Renaissance villas, a Hispano-Pueblo house, two Jacobean houses, one house with Francis I. detail, and a few to which it is hard to give a style name. The variety is fairly typical of our American civilization and country; of our country with its marvelous variety of climate, landscape, topography and building materials, and of our national culture, whose roots penetrate deep into Old World soils, and upon whose branches have been grafted so many growths of alien source, by those processes of internationalization which are at work the world over, nowhere more potently than on our hospitable shores.

It is hard to decide along what lines to classify these various types; whether along the lines of material, geographical location or architectural style. Whichever of these classifications were adopted we should find it crossed by one or both of the others.

So great has been the development of our interstate systems of transportation that it is impossible to localize types, materials or styles, any more than language or custom. Climate and local environment are more determinative of style and type than local materials or any other local influence. Tile and brick and concrete can be laid down on a building site in a well-timbered region, and framing timber, clapboards, shingles and flooring deposited in the midst of a clay country, at a cost so small that the predominance locally of clay, stone or timber no longer determines the material to be used. An architect in Chicago may be designing at the same time a house to be built among the sandy pines of New Jersey and another



FIG. 18.—REMODELED FARMHOUSE COTTAGE OF MRS. J. H. SHAW, DUXBURY, MASS.
Mrs. Shaw, Architect.

for the Pacific coast; thus do the possibilities of establishing permanent local types of design disappear. The bungalow type, originating apparently in California, is now thoroughly domesticated in the East. Stuccoed exteriors, whether stuccoed on tile, stone, concrete or lath, are found scattered from ocean to ocean, and from bleak New England to sunbathed Florida. The half-timbered house is not limited by lines of latitude or longitude, nor by the boundaries of the timber belt, nor by State areas.

This, then, is one of the striking characteristics of our national architecture, domestic as well as civil and religious; that all our types are rather national than local. The result is that in any one section of the United States one may encounter many or all the types familiar in another, so that wherever one travels there is a curious contradictory effect of national unity and local variety. The houses of any one district are singularly various, but for the very reason of the lack of clearly defined provincial styles and types there is little, if any, sense of change in passing from one region to another, and thus the houses of one part of the country look on the whole very much like those of another. In the Old World it is quite otherwise. There is there less constant interchange of commodities, ideas and types between provinces; and local traditions, centuries old, still keep their hold on house-builders and householders. Local materials, local types, provincial styles are persistent. Scotland builds differently from England; the clay regions have developed cottage types quite unlike those where stone abounds; slate roofs abound in one place, tile roofs in another, thatch prevails in another. The cottages of the Gotswold can be easily distinguished in character from those of Hampshire or Sussex. The châlet type of the Alps is rare in the neighborhood of Zurich, and so on.

Nevertheless the discerning eye discovers, if not local types, at least certain broad predominances. The Pacific Coast, the Middle West and the East do not, on the whole, build alike, although indi-

vidual houses in one region may resemble individual houses in another. These three great divisions of our territory have been for several years recognized by the Architectural Record in its annual Country House numbers. In the issue for 1915 Mr. Louis C. Mullgardt notes that "the Pacific Coast States, Washington, Oregon and California, are topographically and climatically separated from the other forty-five States of the Union. The Sierra Nevada constitutes an indestructible barrier," etc. Timber abounds in the northern part of this coast region, but is scarce in the southern part, and the range of climate from Seattle to San Diego is very great. California is Spanish in its traditions; Oregon and Washington Indian and pioneer. There is then a wide variety of house architecture along the coast. Wood predominates in the North, stucco in the South. Washington suggests Norway; California, Italy. The most distinctive types of this coast are those of California, influenced by the Spanish tradition and the wide use of stucco; but the styles used in these types are widely varied. One is Colonial, one suggests a German or Swiss derivation, the third a French or Italian source; while the Roberts house at San Diego (Fig. 72) is frankly Spanish-Pueblo. Yet under all this variety of dress, there is something in the California houses as a whole that is different from Eastern and Middle Western houses as a whole; a different air, a different effect, an atmosphere and aspect hard to analyze, which fits into their environment of air and landscape. The same is true, perhaps less noticeably, of the Eastern houses, with all their variety. Mr. Wight, in his interesting article on the houses of the Middle West in last year's October Architectural Record, has emphasized their distinctive character, which one recognizes in the illustrations to his article, although the particular houses, in many cases, would look perfectly at home in the East. In the Middle West there is one characteristic that is easily noticeable—the emphasis of the horizontal, which may or may not be associated with the flatness of broad prairie regions, and which appears often in the form of widespreading eaves and the avoidance of numerous gables.

Yet allowing for these broad differences, which are subtle rather than obvious, it still remains the fact that each region displays a remarkable variety of types, and that almost any type can be met with in almost any region.

So also with materials and styles. The shingled or clapboarded frame house is more frequent in New England and on Long Island than in California. Stone houses are most numerous near Philadelphia and in parts of New Jersey, where easily worked stone abounds. There are parts of States where brick houses are particularly abundant; but houses of wood, of stone and of brick are built in all the States, and Colonial houses, though naturally more frequently built within the limits of the old Colonies than in the later States, are found also in the Middle West and on the Pacific slope. The general use of stucco is in part responsible for the character of the California houses, but stucco is being used in all parts of the country to an increasing extent, as our illustrations plainly show.

These facts explain why I have preferred in this study not to arrange my discussion nor my illustrations of types in geographical groups, as has been the practice of the Architectural Record for some years past, but to follow another line.

II.

The simplest classification of the types shown is that of material. Wood, brick, stone and stucco suggest four groups of illustrations. The types of wooden houses range from the charmingly simple shingled cottage of Mrs. Shaw at Duxbury, Mass. (Fig. 18), actually a remodeled farmhouse, through the square clapboard Colonial residence at Dalton, in the same State, which suggests Concord, and the Southern example (Fig 19), up to Mr. Magonigle's long and stately mansion for Mr. John French at Greenwich, Conn. (Fig. 27). I have been glad also to show one example of the picturesque shingled type which has grown out of the so-called



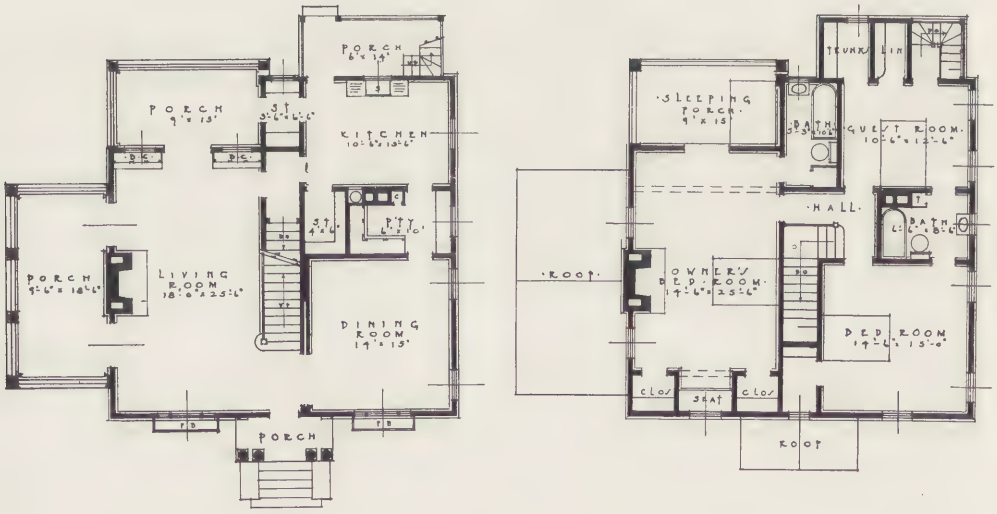


FIG. 19.—HOUSE OF W. BEW WHITE, BIRMINGHAM, ALA.
William Leslie Welton, Architect.

"Queen Anne" style of the eighties (see Fig. 7), a most inviting house by Lord and Hewlett for Mrs. R. L. Stevens at Bernardsville, N. J. (Fig. 22).

Brick has with us been more used for suburban than for truly rural country houses. Two of the examples shown are really suburban residences—those of F. C. Gilsey at Great Neck, L. I., and of N. W. Ewing at St. Louis (Figs. 39 and 41). Both are good examples of modern Colonial design. Several are true country houses on large estates, "Mostly Hall" at Ipswich, Mass., the Dickinson residence at Kansas City, Mo. (Fig. 1), and the Adair House at Atlanta, Ga. The stone houses, all from Pennsylvania and of quite diverse style, follow in order; and then those finished externally in stucco. These include examples, as will be seen, from Massachusetts, Kansas and California, and types from the quasi-bungalow to the palatial villa.

Wood, on the whole, retains the leadership as a material for rural houses, but its supremacy is threatened. It is growing dearer in proportion to other materials and its combustibility is a serious objection. But it is still, in general, the most abundant, cheap and easily worked of our house materials. More than this, it lends itself to the greatest variety of architectural effects, especially such as fit a rural environment, and it has so deeply entered into our American tradition of building that it will not be easily ousted. Our architects generally employ it in an appropriate manner, fully expressive of the material, but occasionally to produce effects not belonging to it. One may question, for instance, whether it is artistically justifiable to seek to imitate the texture and aspect of a thatched roof by narrow-weathered irregularly-cut shingles. Such a roof seems particularly out of place on any house of architectural pretensions, whatever the material.

The same question raises itself as to most of the "half-timber" houses, so-called, of recent date in the United States. The great majority of these are mere imitations; frame houses stuccoed on lath, with purely decorative "half-timbering" of thin boards applied over the plaster, or at most nailed to the frame as stops for the plastering. I have seen photographs of an elaborate house, clapboarded below, with a "half-timber" second story overhanging the first: an evident decorative fake. In the real *pan-de-bois* or half-timber construction the visible decorative framework is the actual framework of heavy timbers, filled in with brick or rubble plastered externally. Such a construction presents no advantages of cost or durability over brick and is not a traditional construction here as it is in Western Europe. When used for its picturesque effect, it seems as though one might insist that it be genuine and not a cheap imitation, however pleasing.

For buildings of a certain Georgian type and for great houses built on Jacobean models, brick is the finest possible material. The illustrations show examples of each of these types taken from widely separated localities. The United States produces a far wider variety of brick as to form, texture and color than any other country. Our architects are beginning to develop new and effective uses for this variety of material, but less in rural than in urban work.

The use of stucco for exterior finish has increased greatly in recent years. It is an ancient and honorable material for this purpose and lends itself to use over a wide range of localities, since it can be applied to lath, concrete, rubble, brick or tile with equal facility. While it is capable of artistic treatment in monumental designs, it is peculiarly suited to houses of modest architectural pretension and suggests domesticity rather than display. It permits of pleasing color in soft tones and lends itself to effects of picturesque charm. Where properly compounded and properly applied it resists extremes of weather and needs no renewal for years. One sees it today on all sorts, sizes and styles of houses. Here is a German-Swiss house at Kansas City, Mo.; a bungalow-type house at Marblehead Neck, Mass.; an interesting house at Waterbury, Conn., of a picturesque English type; three handsome villa mansions from Kansas, Missouri,



FIG. 20.—DETAIL—HOUSE OF JAMES F. OATES, CHICAGO.
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS.



FIG. 21.—HOUSE OF JAMES F. OATES, CHICAGO.
Richard E. Schmidt, Garden & Martin, Architects.

and California, and three palatial villas from the latter State. And finally, there is stone—the most dignified and monumental of all materials for walls. It speaks for itself, and the few examples shown—for it is the least used of all materials in American rural architecture—suggest the variety of styles of design for which it is suited. The chief obstacle to its wider use, even where it abounds, is the high cost of shaping and laying it up. Good stonemasons are as rare here as they are abundant in Europe; and they and the stonecutters are more highly paid here than in any European country.

I have omitted concrete from the list, though its use is increasing Nearly all houses of poured concrete are externally stuccoed, as they ought to be, since concrete, besides being far from impervious to moisture, weathers usually into unpleasant colors.

III.

The question of styles deserves more space than remains for it, even in this very cursory discussion of the American country house. The historical evolution of the styles seen in our rural architecture has already been briefly sketched. There is in the history and relations of our nation a measure of justification for the appearance of European types in that architecture, and it will be noticed that most of these are of English origin. The Italian villa has also numerous representatives, especially on the Pacific coast, where the climate and the landscape, especially in Southern California, have many points of resemblance to the Italian, as appears strikingly in some of our illustrations. But neither in the architecture of these palatial houses nor in the gardens has there been any servile copying of Italian examples, though the source of their inspiration is obvious.

The Colonial comes the nearest to being a national style among all the variety seen in American country houses. In its modern revival it has been developed in houses of much larger size and greater architectural splendor than



FIG. 22.—GARDEN FRONT—HOUSE OF MRS. R. L. STEVENS, BERNARDSVILLE, N. J.
Lord & Hewlett, Architects.



FIG. 23.—HOUSE OF MRS. R. L. STEVENS, BERNARDSVILLE, N. J.
Lord & Hewlett, Architects.

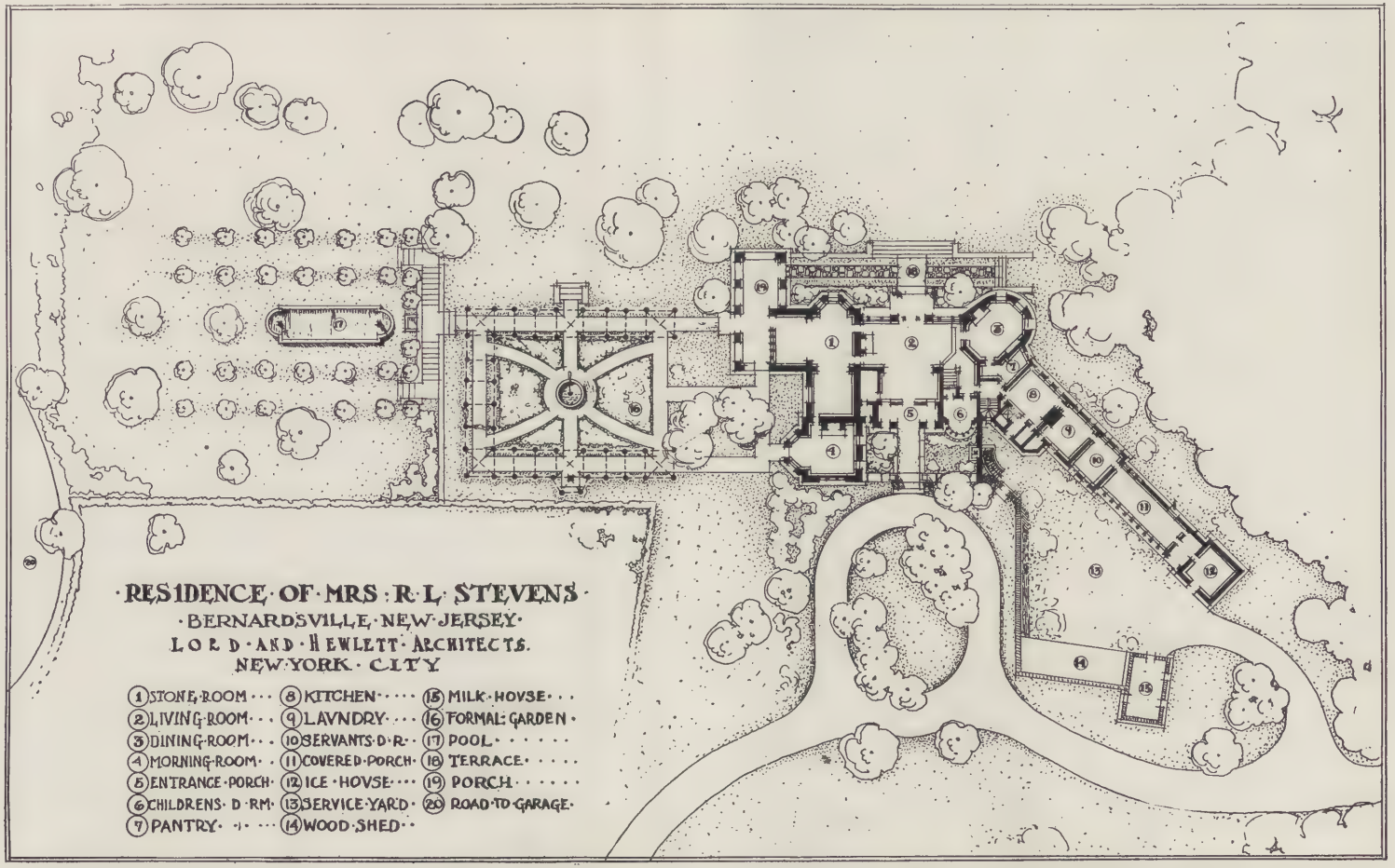


FIG. 24.—GROUND PLAN—HOUSE OF MRS. R. L. STEVENS, BERNARDSVILLE, N. J. (FIGS. 100 AND 106.) LORD & HEWLETT, ARCHITECTS.



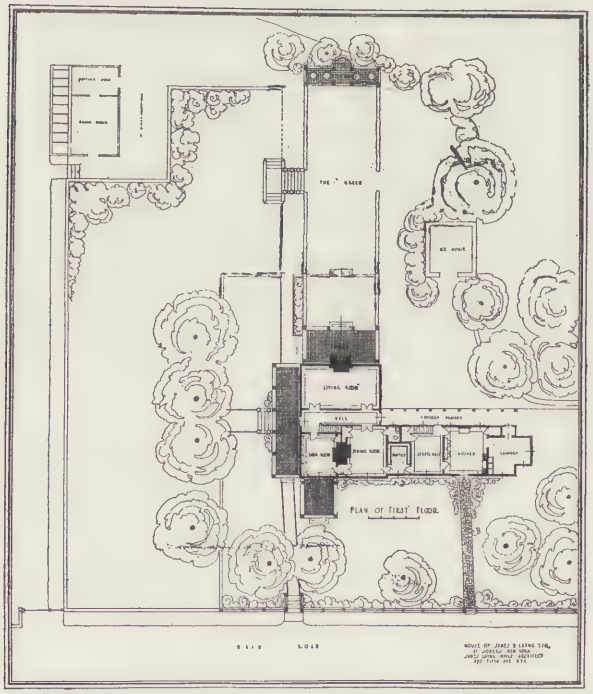


FIG. 25.—HOUSE OF JAMES D. LAYNG, JR., GOLDEN BRIDGE, N. Y. JAMES LAYNG MILLS, ARCHITECT.



FIG. 26.—HOUSE OF W. A. LIPPINCOTT, GREAT NECK, L. I.
Patterson & Dula, Architects.

were common in the eighteenth century, and on the whole with considerable success. Mr. Aymar Embury II, in the last issue of that interesting annual, "American Country Houses of Today," expresses the opinion that on the whole the average Colonial work of today is better than the average of the old work. That may or may not be true. It ought to be true in almost every respect, for the modern designer enjoys immense advantages over his predecessors of the eighteenth century in education, resources, tools, books and materials. Why then is the modern work not always and indisputably superior to the old? The reply must go to the root of every style that is a conscious revival. The Colonial of the eighteenth century was the natural and spontaneous expression of the tastes, ideals and traditions of its time. It developed, like all vital styles, intensively. The same problem was attacked again and again with the same means. The same moldings, panelings, spiral balusters were used without change, time after time. The simplicity of the result, to which its charm is so largely due, reflected the simplicity of life and taste of the day. The books were few, and the same patterns were used over a wide area and through a long period.

The modern revivalist has different and more difficult conditions confronting him. He has first to learn the style, from books or from the surviving examples; he is not born and bred to it, like the Colonial house-carpenter. He then has to apply it to the modern problem, which is in itself far more complex than the house problems of the eighteenth century; and adaptation is one of the most difficult of operations. To preserve the spirit and quality of the old while changing its forms or extending its applications, to adapt it to wholly new conditions, demands the highest artistic imagination and the most refined taste. One may copy every detail from old examples in the books and yet produce an utterly dry and lifeless result. One may, on the other hand, design a house in which not a single detail has a precise counterpart in old work and which nev-



FIG. 27.—HOUSE OF JOHN FRENCH, GREENWICH, CONN. H. VAN BUREN MAGONIGLE, ARCHITECT.

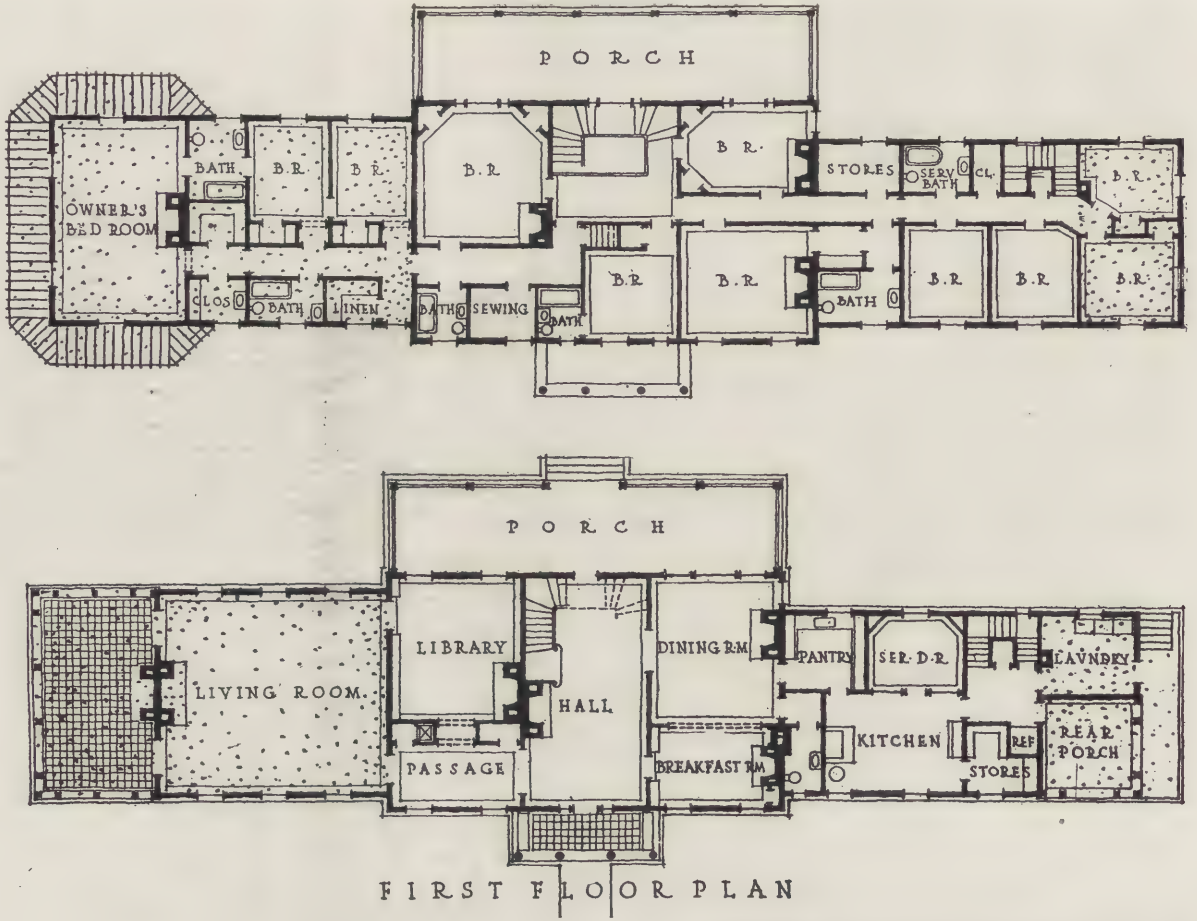


FIG. 28.—FIRST AND SECOND FLOOR PLANS—HOUSE OF JOHN FRENCH, GREENWICH, CONN. H. VAN BUREN MAGONIGLE, ARCHITECT.





FIG. 29.—HOUSE OF C. D. ARMSTRONG, OSTERVILLE, MASS. ALDEN & HARLOW, ARCHITECTS.



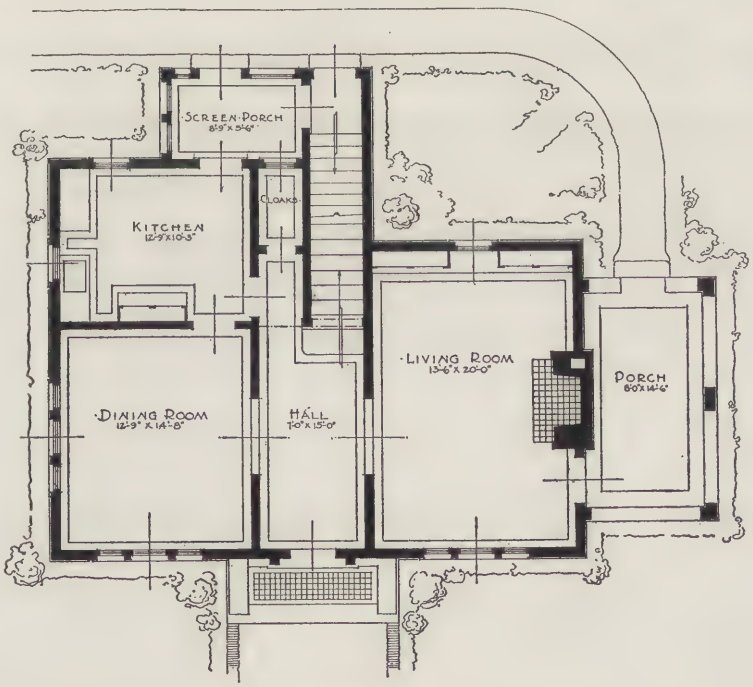


FIG. 30.—HOUSE OF P. H. WARD, STERLING, ILL. (Cost, with furnace and plumbing, $4,500.)
Fugard & Knapp, Architects.



FIG. 31.—VIEW FROM GARDEN—HOUSE OF JAMES L. DICKEY, JR., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



FIG. 32.—HOUSE OF JAMES L. DICKEY, JR., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.

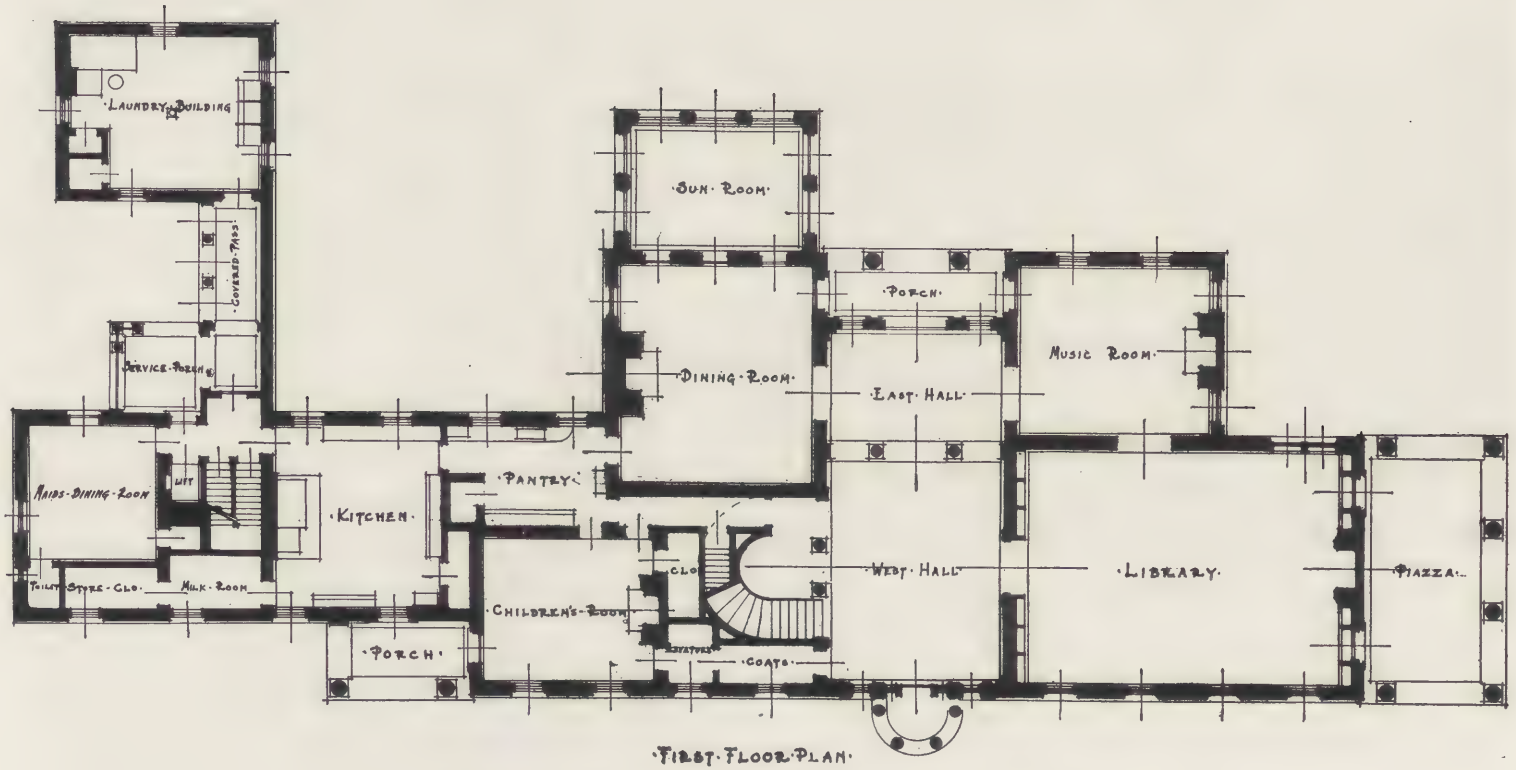


FIG. 33.—FIRST FLOOR PLAN—HOUSE OF LOUIS H. PORTER, STAMFORD, CONN. AYMAR EMBURY II, ARCHITECT.



FIG. 34.—HOUSE OF LEWIS H. PORTER, STAMFORD, CONN. (FIGS. 87 AND 94.) AYMAR EMBURY II, ARCHITECT.



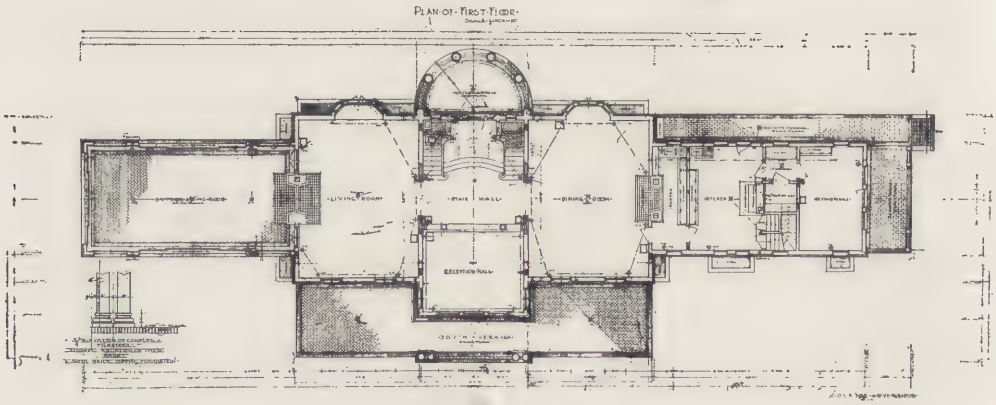


FIG. 35.—HOUSE OF JOHN ANDERSON, LOCUST VALLEY, L. I. H. CRAIG SEVERANCE AND WALTER SCHUMM, **ARCHITECTS.**



FIG. 36.—"MOSTLY HALL"—ESTATE OF JAMES H. PROCTOR, IPSWICH, MASS.



FIG. 37.—STABLES—ESTATE OF JAMES H. PROCTOR, IPSWICH, MASS.



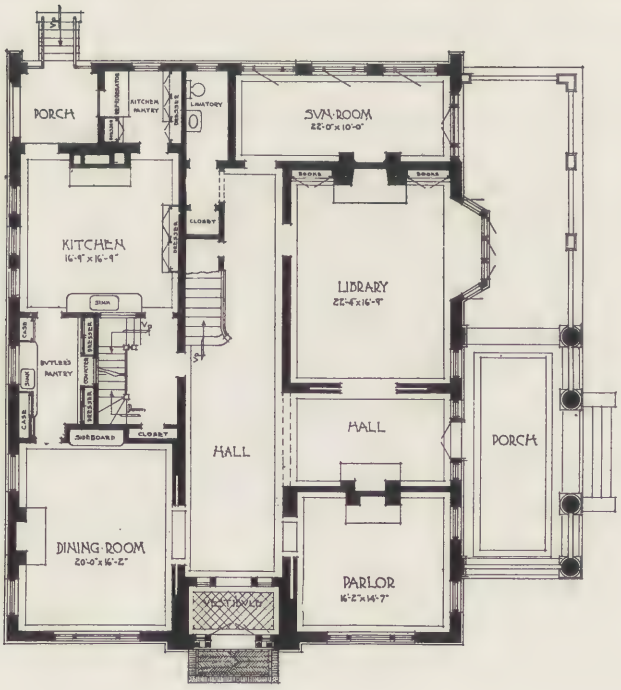


FIG. 38.—HOUSE OF E. J. TAYLOR, PITTSBURGH, PA. ALDEN & HARLOW, ARCHITECTS.





FIG. 39.—HOUSE OF NAT. W. EWING, ST. LOUIS, MO. (FIGS. 88 AND 99.) GUY STUDY, ARCHITECT.

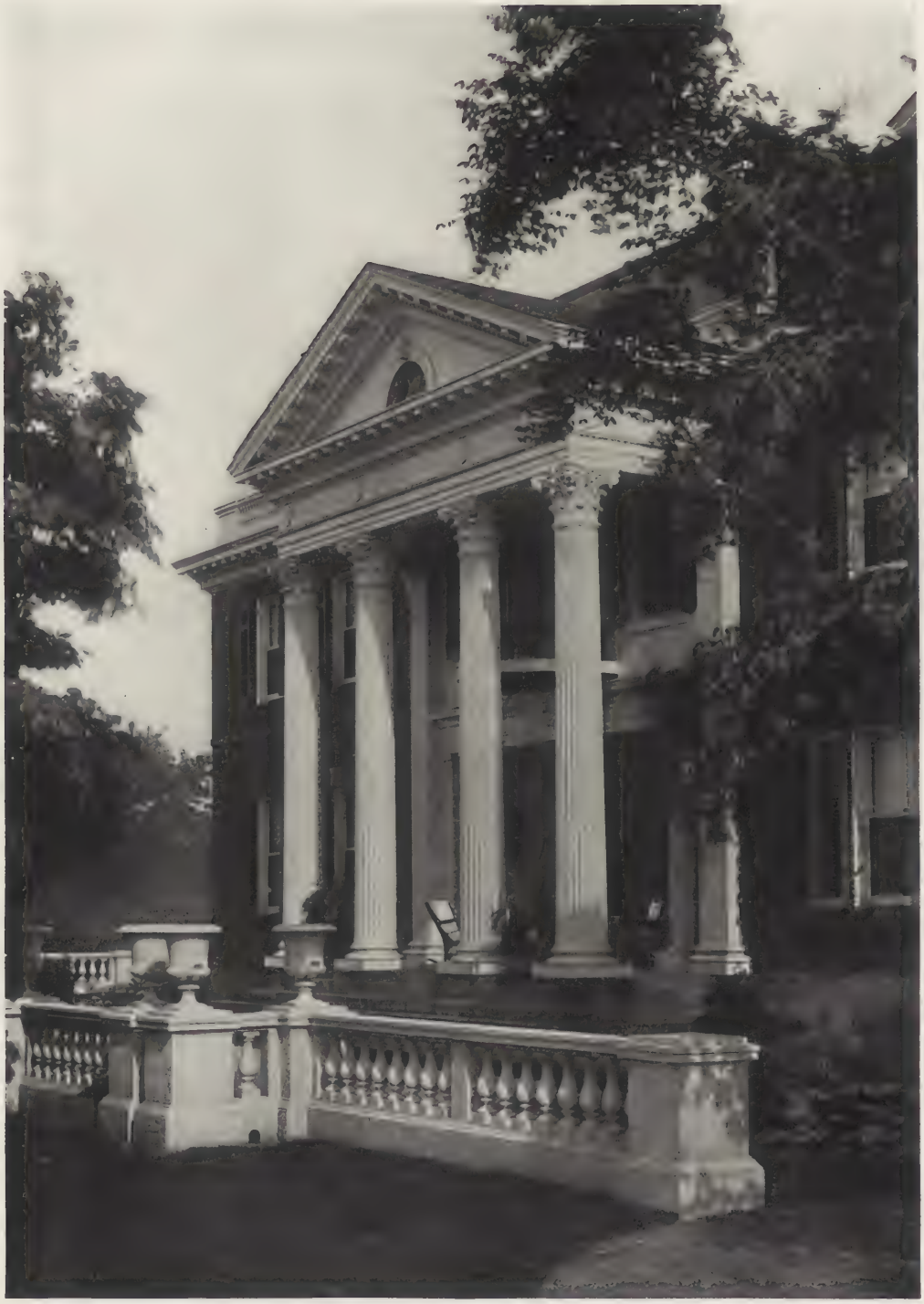


FIG. 40.—HOUSE OF MRS. W. N. FREW, PITTSBURGH, PA. ALDEN & HARLOW, ARCHITECTS.





FIG. 41.—HOUSE OF F. C. GILSEY, GREAT NECK, L. I. (FIGS. 88 AND 98.) HENRY OTIS CHAPMAN, ARCHITECT.

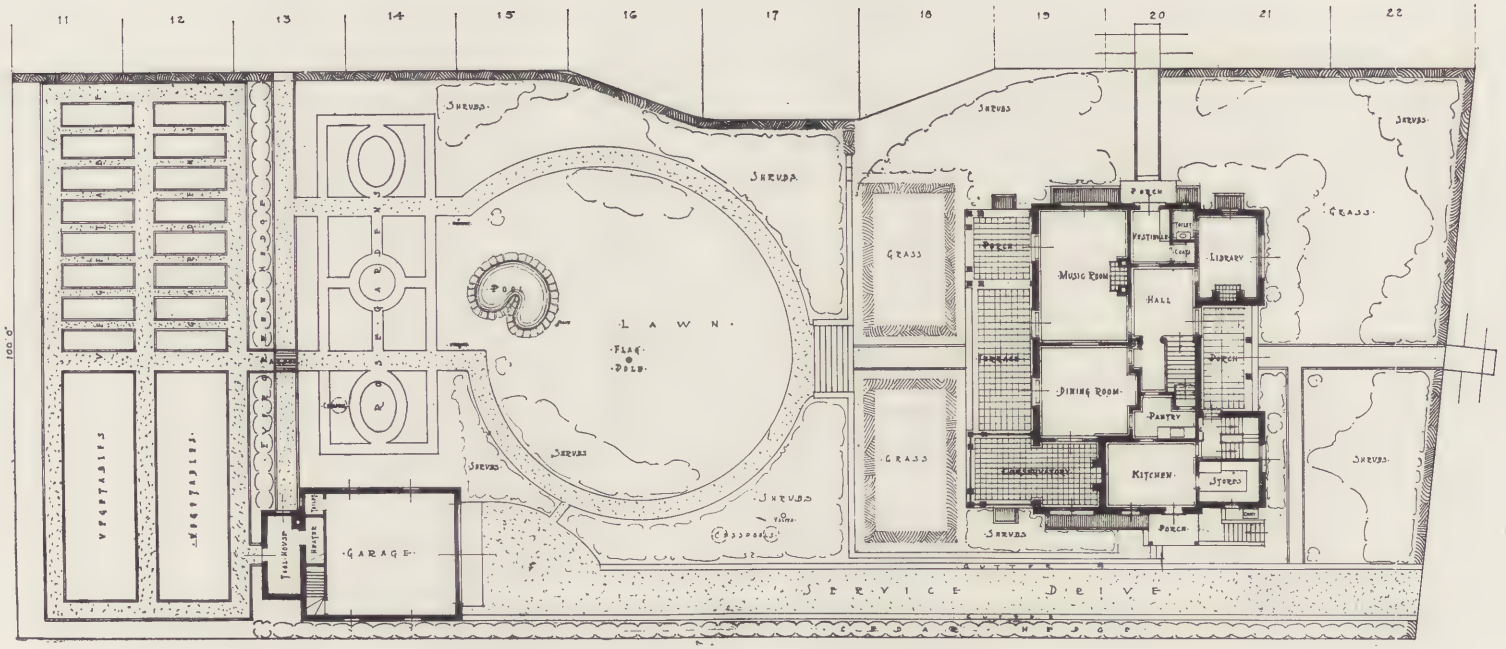


FIG. 42.—GROUND PLAN—HOUSE OF ROBERT WYDER, DOUGLAS MANOR, L. I. (FIG. 101.) ALFRED BUSSELLE, ARCHITECT.



FIG. 43—HOUSE OF ROBERT WYDER, DOUGLAS MANOR, L. I. (FIG. 101.) ALFRED BUSSELLE, ARCHITECT.



FIG. 44.—HOUSE OF GEORGE ADAIR, DRUID HILLS, ATLANTA, GA. (FIGS. 17, 90 AND 97.) EDWARD E. DOUGHERTY, ARCHITECT.



FIG. 45.—HOUSE OF F. O. ZENKE, RIVERDALE, N. Y. DWIGHT BAUM, ARCHITECT.



FIG. 46.—DETAIL—HOUSE OF F. O. ZENKE, RIVERDALE, N. Y. DWIGHT BAUM, ARCHITECT.



FIG. 47.—ENTRANCE—HOUSE OF F. O. ZENKE, RIVERDALE, N. Y. DWIGHT BAUM, ARCHITECT.



FIG. 48.—HOUSE OF JESSE WOOLF, NEW ROCHELLE, N. Y.
Smith & Ross Architects.
A. F. Brinckerhoff, Landscape Architect.



FIG. 49.—HOUSE OF EUSTIS L. HOPKINS, LARCHMONT, N. Y.
C. A. Valentine, Architect.



FIG. 50.—ENTRANCE—HOUSE OF EUSTIS L. HOPKINS, LARCHMONT, N. Y. (FIGS. 85 AND 96.) C. A. VALENTINE, ARCHITECT.



FIG. 51.—ENTRANCE—HOUSE OF H. A. SWIGART, EVANSTON, ILL. HOWARD VAN DOREN SHAW, ARCHITECT.



FIG. 52.—HOUSE OF H. A. SWIGART, EVANSTON, ILL. HOWARD VAN DOREN SHAW, ARCHITECT.



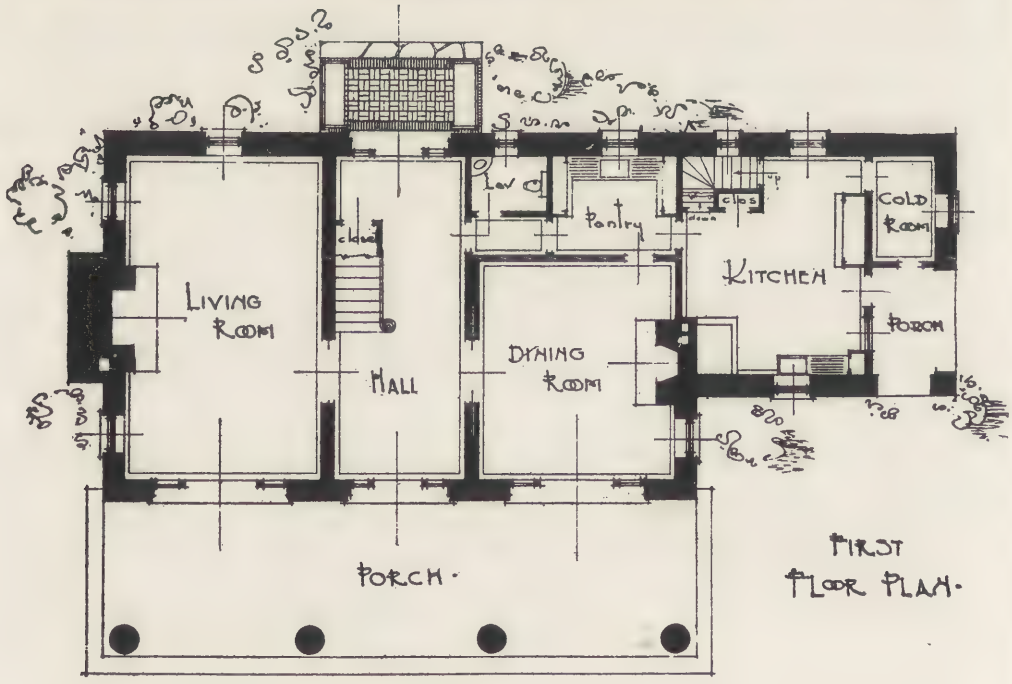


FIG. 53.—HOUSE IN GERMANTOWN, PA.
DUHRING, OKIE & ZIEGLER, ARCHITECTS.



FIG. 54.—GENERAL VIEW SHOWING SERVICES AND GARAGES —TWO HOUSES FOR THE MORRIS ESTATE, OVERBROOK, PHILADELPHIA. MELLOR, MEIGS & HOWE, ARCHITECTS.



FIG. 55.—HOUSE OF THOMAS KENYON, PITTSBURGH, PA. (Figs. 13 and 56.)
Alden & Harlow, Architects.

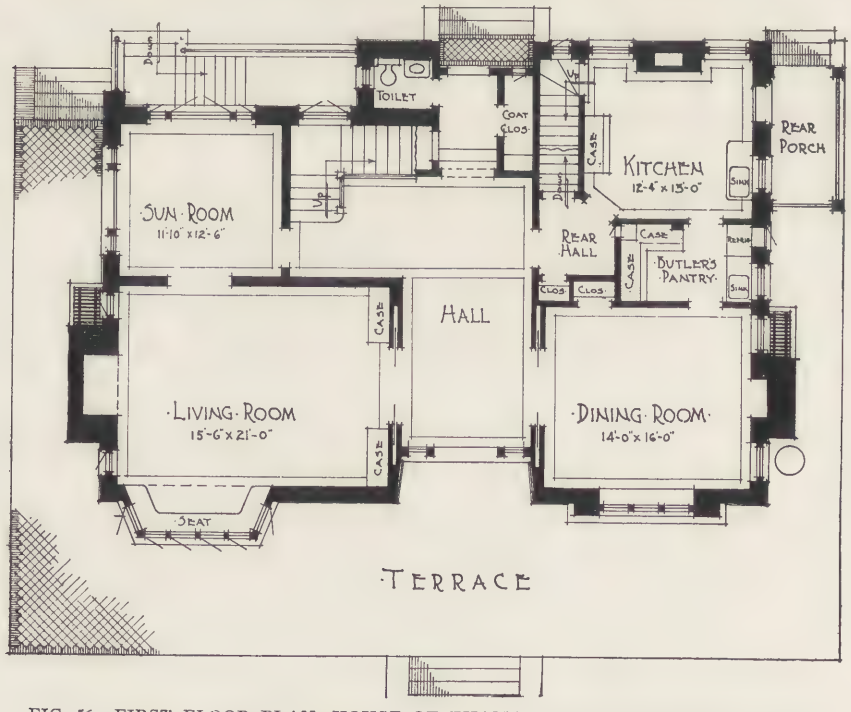


FIG. 56.—FIRST FLOOR PLAN—HOUSE OF THOMAS KENYON, PITTSBURGH, PA.
Alden & Harlow, Architects.



FIG. 57.—HOUSE OF J. C. HOLLANDER, MYSTERY ISLAND, BEVERLEY FARMS, MASS. W. G. RANTOUL, ARCHITECT.

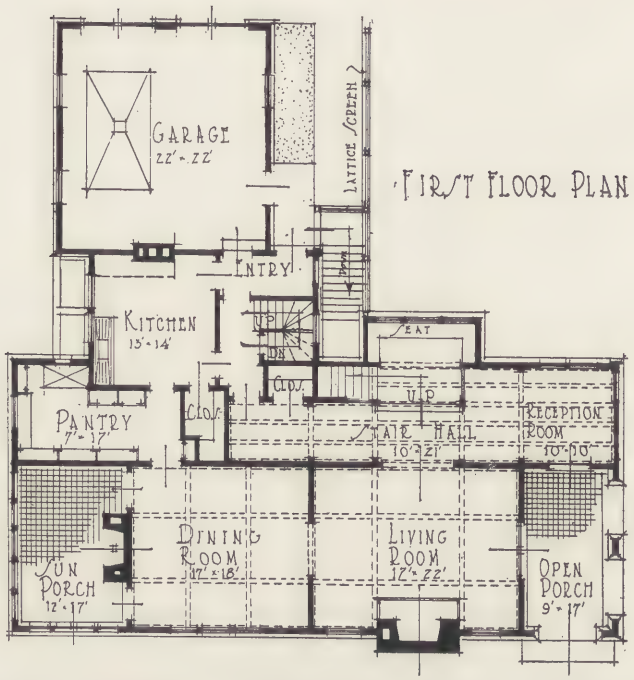


FIG. 58.—FIRST FLOOR PLAN—HOUSE OF J. R. CROWE, JR., KANSAS CITY, MO.
John Van Brunt, Architect.

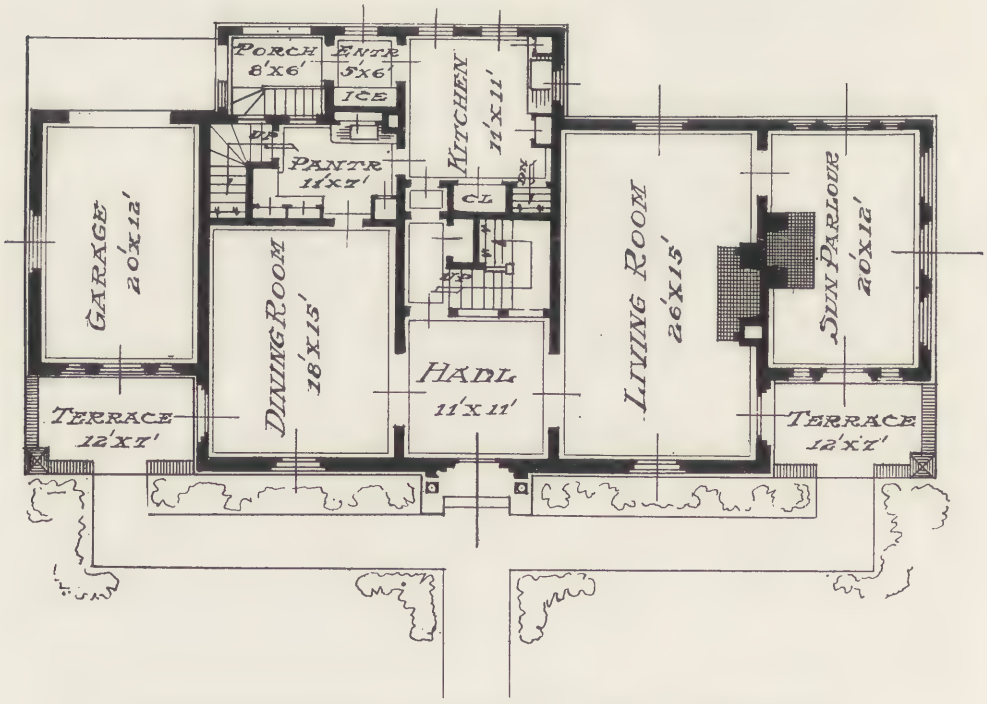


FIG. 59.—FIRST FLOOR PLAN—HOUSE OF H. L. ROOT, KANSAS CITY, MO.
John Van Brunt, Architect.



FIG. 60.—HOUSE OF J. R. CROWE, JR., KANSAS CITY, MO.
John Van Brunt, Architect.



FIG. 61.—HOUSE OF H. L. ROOT, KANSAS CITY, MO.
John Van Brunt, Architect.

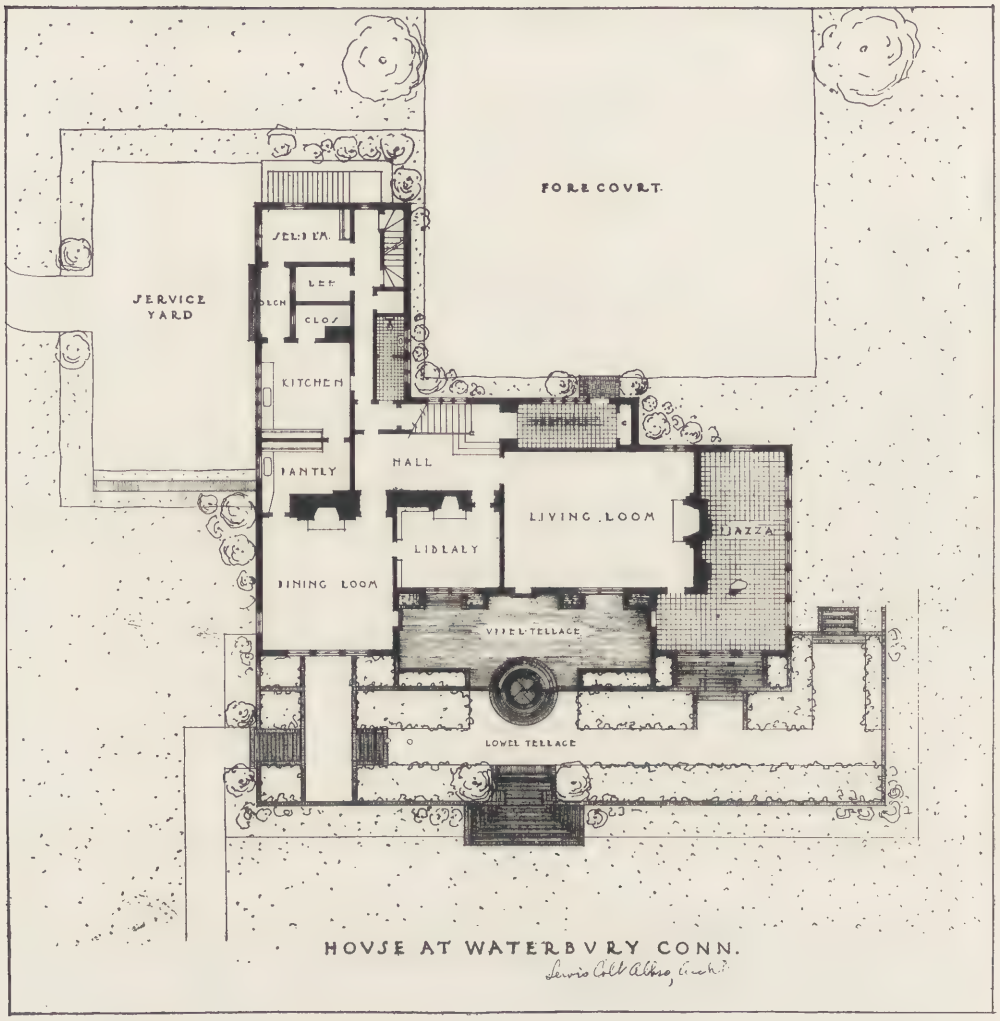


FIG. 62.—FIRST FLOOR PLAN—HOUSE AT WATERBURY, CONN. LEWIS COLT ALBRO, ARCHITECT.



FIG. 63.—HOUSE AT WATERBURY, CONN. L. C. ALBRO, ARCHITECT.

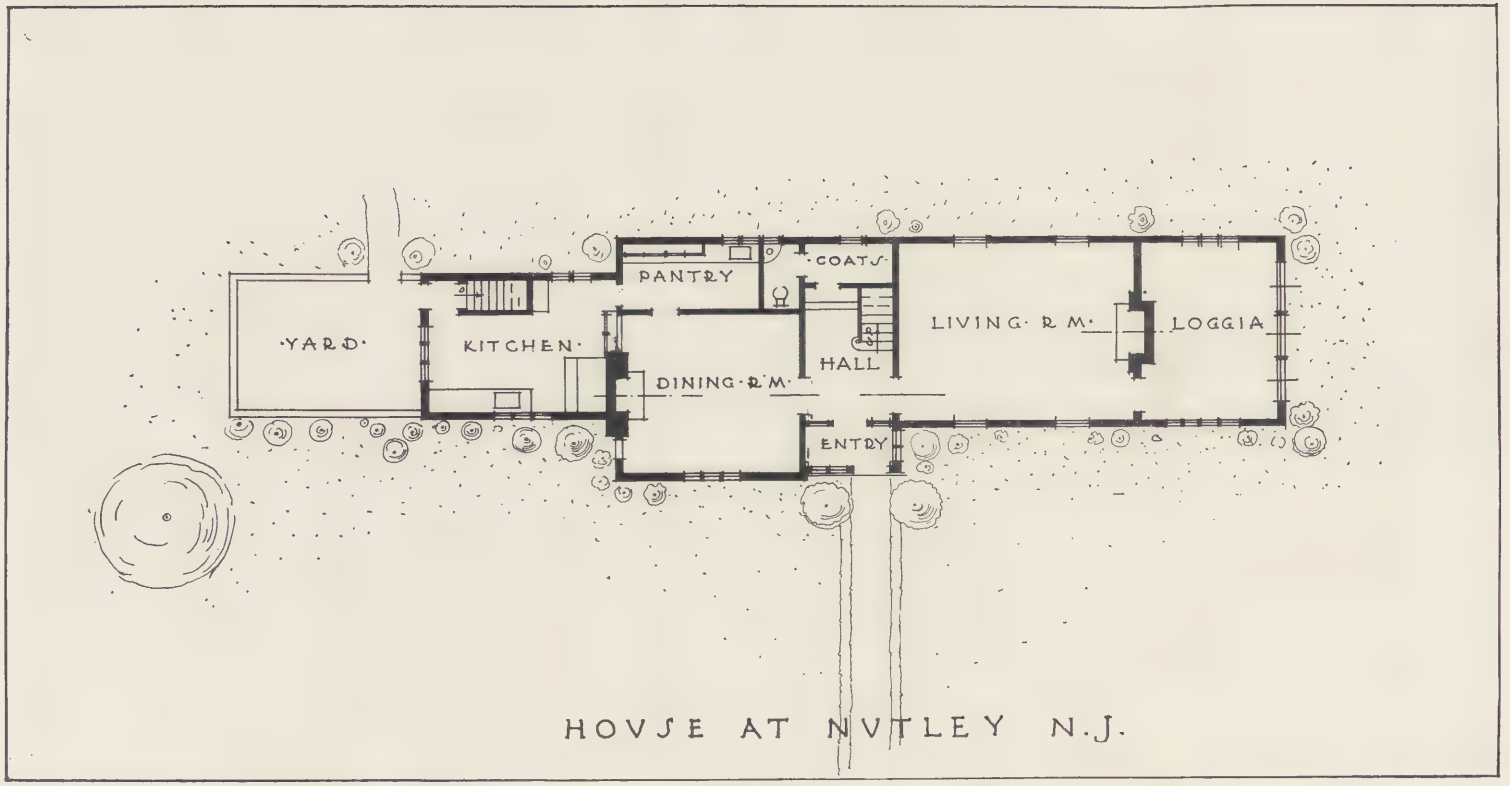


FIG. 64.—FIRST FLOOR PLAN—HOUSE AT NUTLEY, N. J. LEWIS COLT ALBRO, ARCHITECT.



FIG. 65.—HOUSE AT NUTLEY, N. J.
LEWIS COLT ALBRO, ARCHITECT.



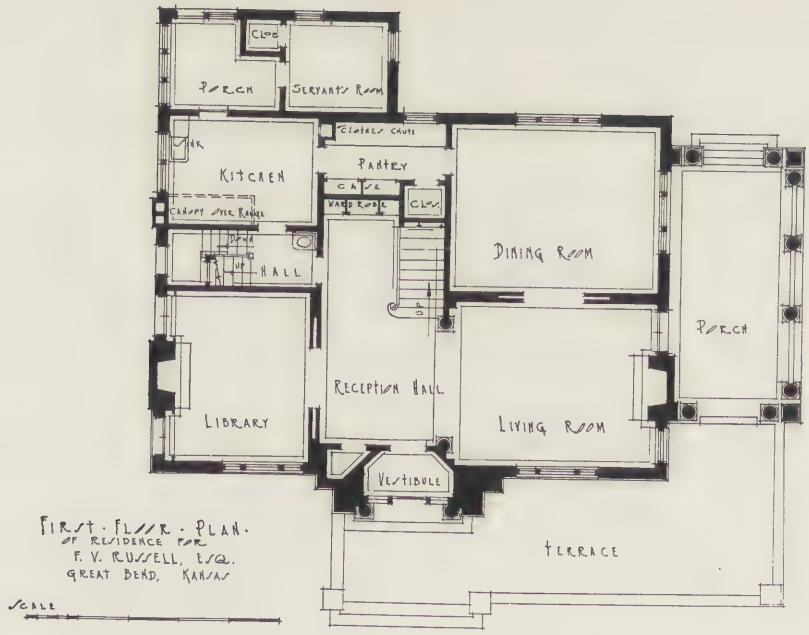


FIG. 66.—HOUSE OF F. V. RUSSELL, GREAT BEND, KAN. OWEN & PAYSON, ARCHITECTS.



FIG. 67.—TERRACE—HOUSE OF C. STUDEBAKER, JR., SOUTH BEND, IND. GREEN & WICK AND R. WEINRICHTER, ARCHITECTS.



FIG. 68.—ENTRANCE—HOUSE OF C. STUDEBAKER, JR., SOUTH BEND, IND. GREEN & WICK AND R. WEINRICHTER, ARCHITECTS.



FIG. 69.—HOUSE OF J. C. STUDEBAKER, JR., SOUTH BEND, IND. GREEN & WICK AND R. WEINRICHTER, ARCHITECTS.



FIG. 70.—LIVING ROOM—HOUSE OF DENT H. ROBERT, CORONADO, CAL.
William Templeton Johnson, Architect.



FIG. 71.—FIRST FLOOR PLAN—HOUSE OF DENT H. ROBERT, CORONADO, CAL.
William Templeton Johnson, Architect.



FIG. 72.—FRONT ENTRANCE DETAIL—HOUSE OF DENT H. ROBERT, CORONADO, CAL.
William Templeton Johnson, Architect.



FIG. 73.—COURT—HOUSE OF DENT H. ROBERT, CORONADO, CAL.
William Templeton Johnson, Architect.



FIG. 74.—HOUSE OF MRS. J. E. HICKS, PASADENA, CAL. (Figs. 84 and 95.)
Marston & Van Pelt, Architects.

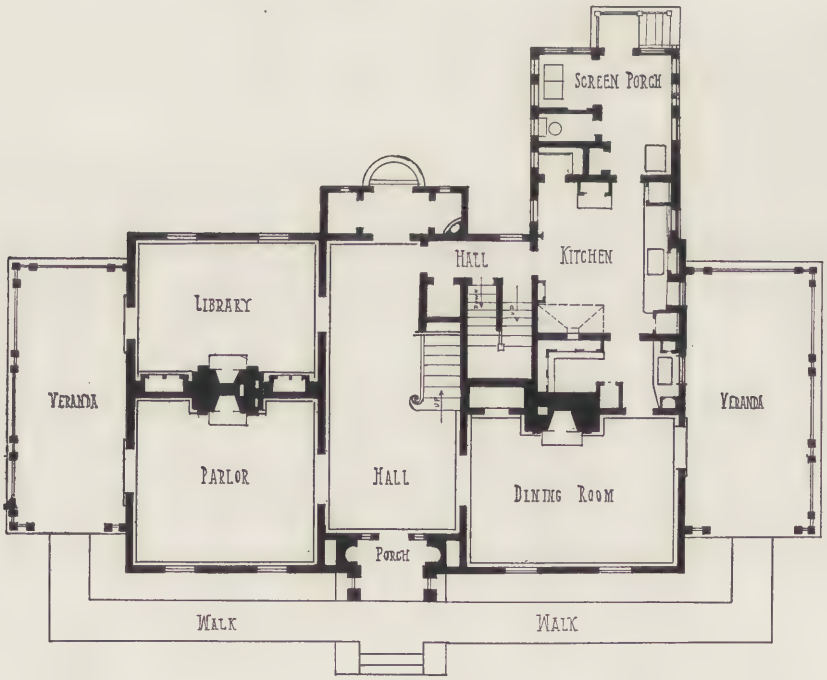


FIG. 75.—FIRST FLOOR PLAN—HOUSE OF MRS. J. E. HICKS, PASADENA, CAL.
Marston & Van Pelt, Architects.



FIG. 76.—HOUSE OF H. E. BIDWELL, PASADENA, CAL.
Marston & Van Pelt, Architects.



FIG. 77.—HOUSE OF MRS. THOMAS CURTIN, PASADENA, CAL.
Marston & Van Pelt, Architects.

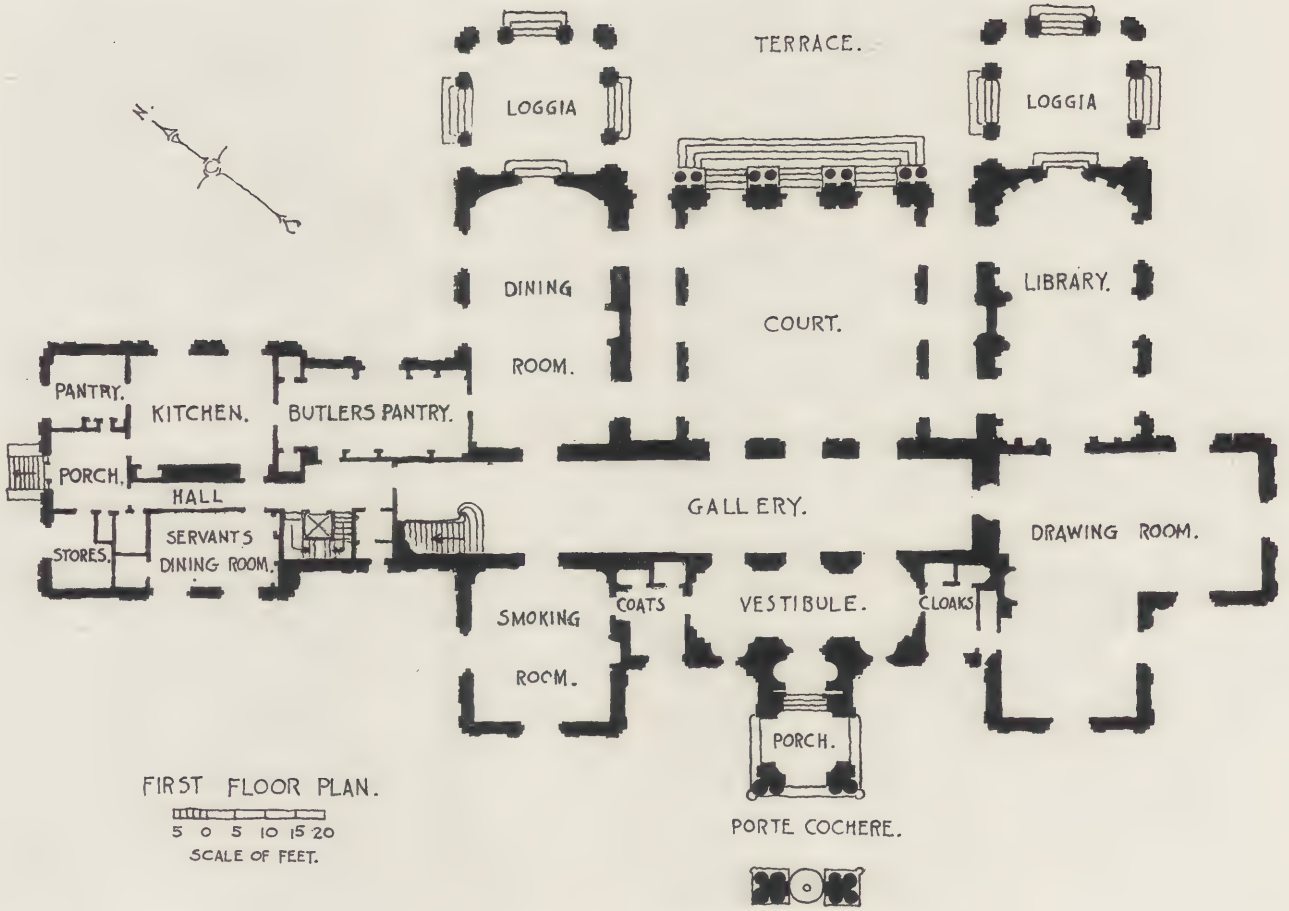


FIG. 78.—FIRST FLOOR PLAN—HOUSE OF CHARLES TEMPLETON CROCKER, HILLSBORO, CAL. WILLIS POLK & CO., ARCHITECTS.



FIG. 79.—HOUSE OF CHARLES TEMPLETON CROCKER, HILLSBORO, CAL. WILLIS POLK & CO., ARCHITECTS.

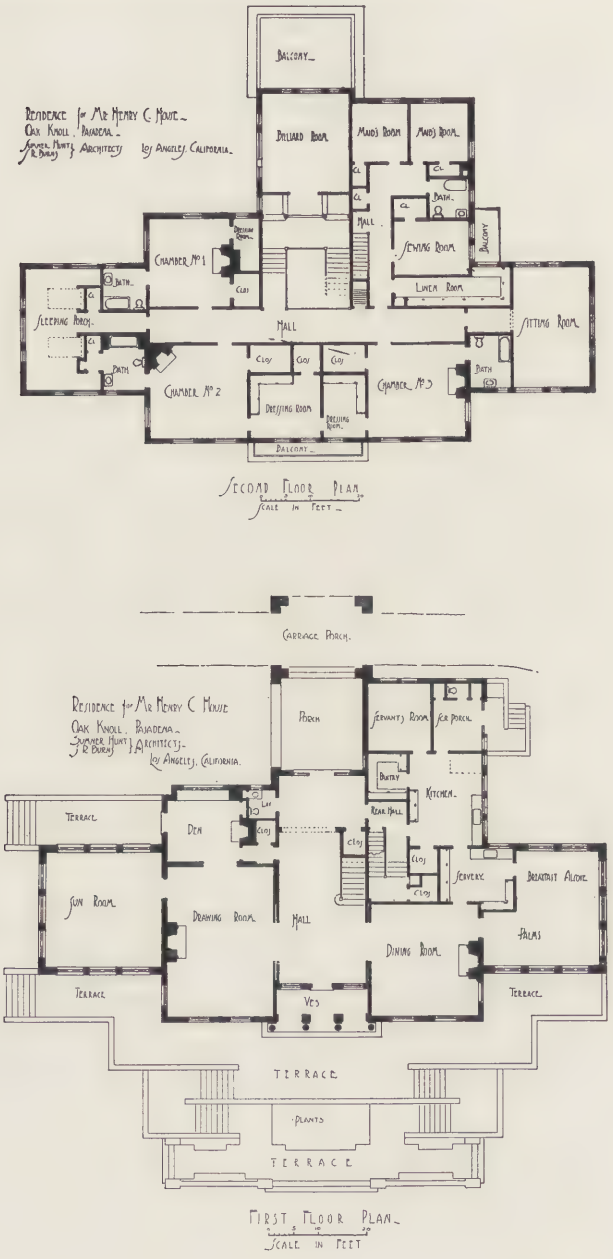


FIG. 80.—FIRST AND SECOND FLOOR PLANS—HOUSE OF HENRY C. HOUSE, PASADENA, CAL.
Sumner Hunt and S. R. Burns, Architects.



FIG. 81.—HOUSE OF HENRY C. HOUSE, OAK KNOLL, PASADENA, CAL. SUMNER HUNT AND S. R. BURNS, ARCHITECTS.



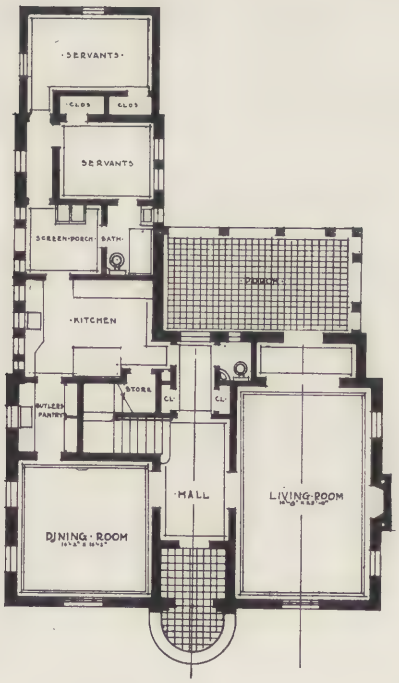


FIG. 82.—HOUSE OF B. C. KECK, PASADENA, CAL. REGINALD D. JOHNSON, ARCHITECT.



FIG. 83.—CIRCULAR PORCH.



FIG. 84.—STAIR HALL—HOUSE OF MRS. J. E. HICKS, PASADENA, CAL. (Figs. 74, 75 and 95.)
Marston & Van Pelt, Architects.



FIG. 85.—STAIR HALL—HOUSE OF EUSTIS L. HOPKINS, LARCHMONT, N. Y. (Figs. 49, 50 and 96.)
Charles A. Valentine, Architect.



FIG. 86.—STAIR HALL—HOUSE OF ALFRED MELLOR, GERMANTOWN, PHILADELPHIA. (FIGS. 5 AND 93.) MELLOR & MEIGS, ARCHITECTS.



FIG. 87.—STAIR HALL—HOUSE OF LEWIS H. PORTER, STAMFORD, CONN. (FIGS. 33, 34 AND 94.) AYMAR EMBURY II, ARCHITECT.



FIG. 88.—STAIR HALL—HOUSE OF NAT. W. EWING, ST. LOUIS, MO. (FIGS. 39 AND 99.) GUY STUDY, ARCHITECT.



FIG. 89.—STAIR HALL, LOOKING INTO DINING ROOM HOUSE OF F. C. GILSEY, GREAT NECK, L. I. (FIGS. 41 AND 98.) HENRY OTIS CHAPMAN, ARCHITECT.



FIG. 90.—STAIR HALL—HOUSE OF GEORGE ADAIR, DRUID HILLS, ATLANTA, GA. (FIGS. 17, 44 AND 97.) EDWARD E. DOUGHERTY, ARCHITECT.



FIG. 91.—STAIR HALL—HOUSE OF JOHN ANDERSON, LOCUST VALLEY, L. I. (FIG. 35.) H. CRAIG SEVERANCE, ARCHITECT.



FIG. 92.—LIVING ROOM—HOUSE OF MRS. JOHN P. BENSON, FLUSHING, L. I. JOHN P. BENSON, ARCHITECT.



FIG. 93.—LIVING ROOM—HOUSE OF ALFRED MELLOR, GERMANTOWN, PHILADELPHIA. (FIGS. 5 AND 86.) MELLOR & MEIGS, ARCHITECTS.



FIG. 94.—LIVING ROOM—HOUSE OF LEWIS H. PORTER, STAMFORD, CONN. (FIGS. 33, 34 AND 87.) AYMAR EMBURY II, ARCHITECT.



FIG. 95.—BED-CHAMBER—HOUSE OF MRS. T. E. HICKS, PASADENA, CAL. (FIGS. 74, 75 AND 84.) MARSTON & VAN PELT, ARCHITECTS.



FIG. 96.—LIVING ROOM—HOUSE OF EUSTIS L. HOPKINS, LARCHMONT, N. Y. (FIGS. 49, 50 AND 85.) CHARLES A. VALENTINE, ARCHITECT.

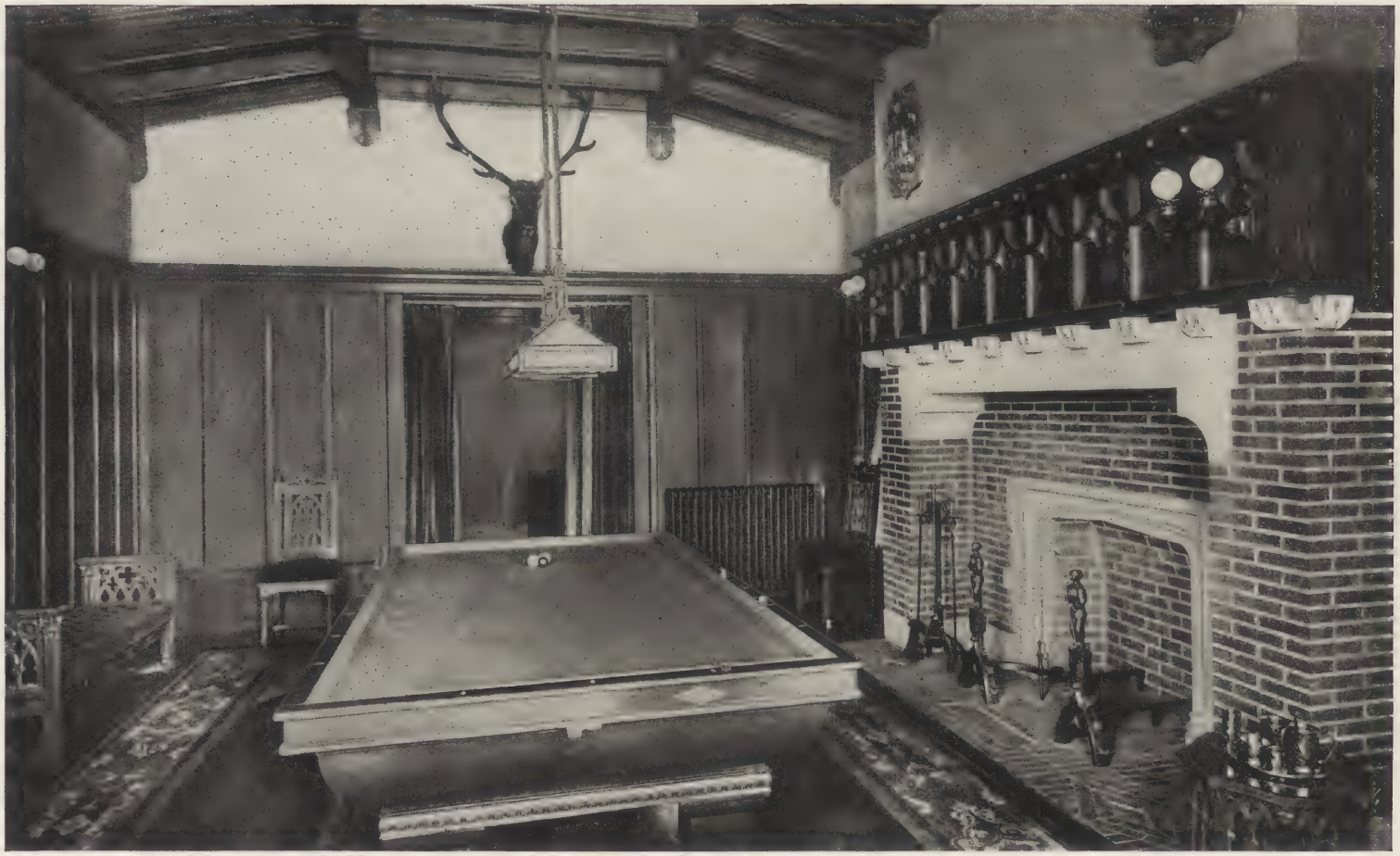


FIG. 97.—BILLIARD ROOM—HOUSE OF GEORGE ADAIR, DRUID HILLS, ATLANTA, GA. (FIGS. 17, 44 AND 90.) EDWARD E. DOUGHERTY ARCHITECT.



FIG. 98.—BREAKFAST ROOM—HOUSE OF F. C. GILSEY, GREAT NECK, L. I. (FIGS. 41 AND 89.) HENRY OTIS CHAPMAN, ARCHITECT.



FIG. 99.—SUN ROOM—HOUSE OF NAT. W. EWING, ST. LOUIS, MO. (FIGS. 39 AND 88.) GUY STUDY, ARCHITECT.



FIG. 100.—PIAZZA—HOUSE OF MRS. R. L. STEVENS, BERNARDSVILLE, N. J. (FIGS. 22, 23, 24 AND 106.) LORD & HEWLETT, ARCHITECTS.



FIG. 101.—TERRACE AND PORCH—HOUSE OF ROBERT WYDER, DOUGLAS MANOR, L. I. (FIGS. 42 AND 43.) ALFRED BUSSELLE, ARCHITECT.



FIG. 102.—TERRACE—HOUSE OF FRANK BAILEY, LOCUST VALLEY, L. I. H. CRAIG SEVERANCE, ARCHITECT.

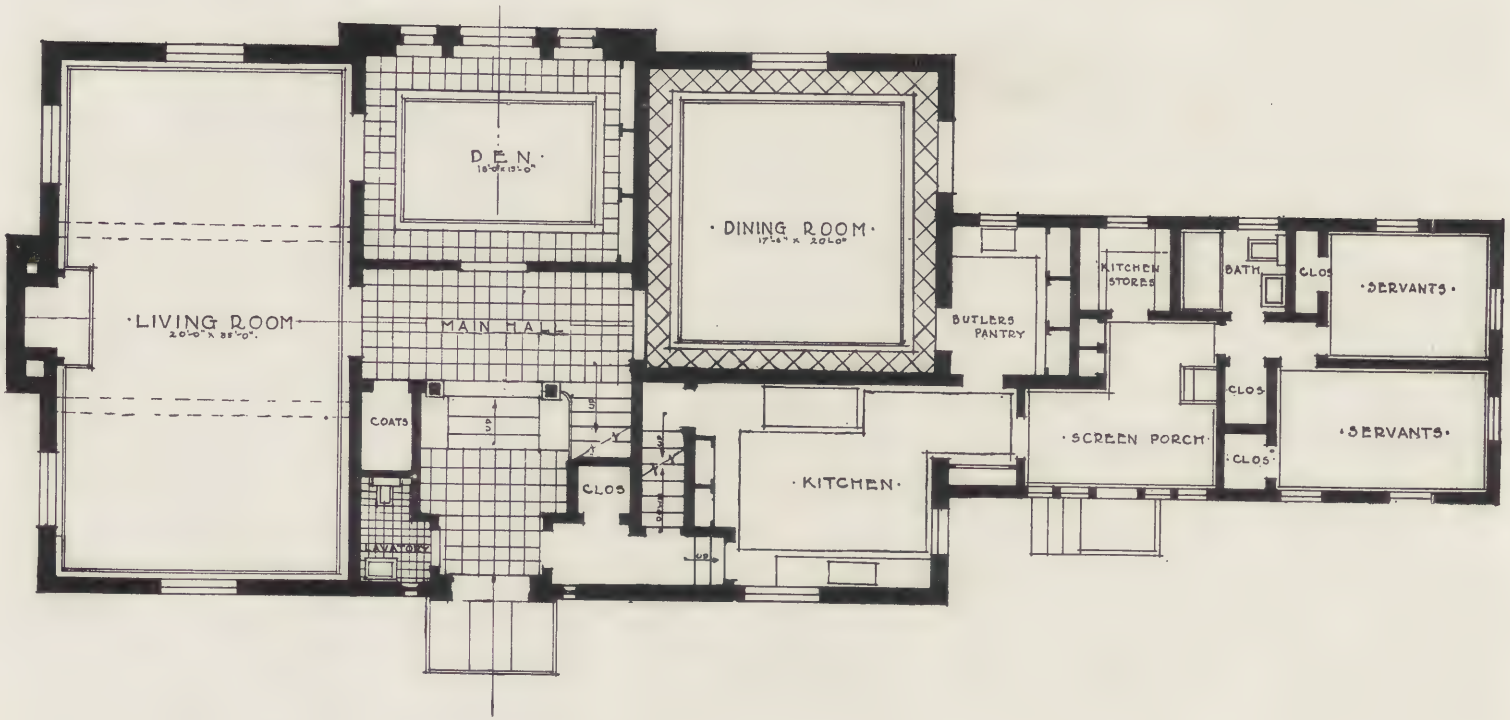


FIG. 103.—FIRST FLOOR PLAN—HOUSE OF DR. J. S. TANNER, PASADENA, CAL. REGINALD D. JOHNSON, ARCHITECT.



FIG. 104.—HOUSE AND GROUNDS OF DR. JOHN S. TANNER, PASADENA, CAL. REGINALD D. JOHNSON, ARCHITECT.



FIG. 105.—TERRACE AND PROSPECT—HOUSE OF JAMES K. MOFFETT, PIEDMONT, CAL.



FIG. 106.—GARDEN AND POOL—HOUSE OF MRS. R. L. STEVENS, BERNARDSVILLE, N. J. (FIGS. 22, 23, 24 AND 100.) LORD & HEWLETT, ARCHITECTS.

ertheless is full of the charm and character of the eighteenth century. "The letter killeth, the spirit maketh alive" in architecture as truly as in Scripture. There is a great deal of common sense and artistic wisdom in the letter from a young architect of the Middle West in the "Notes and Comments" of the Architectural Record for October, 1916. The *"delicate working distinction at all times between the past tense and the present tense"* therein laid down as a fundamental is a rare achievement, but more frequent now than it was twenty years ago. Simplicity and frankness of design and a sympathetic adjustment of the old to the new are observable in all the best work shown in the illustrations. Probably the most difficult task that can be laid on the architect is the preservation of this Colonial simplicity in the designing of a great country house. With increase of size and cost, stateliness and splendor are constantly seeking to creep in, and the quiet charm of the true Colonial spirit evaporates. For such problems one does well to follow the later types of the Georgian as it passed over into the Roman Revival, or else to abandon the Colonial entirely in favor of a more Italian fashion of design. After all, it is not in this or that style, nor indeed in any archeological conformity to style, that the secret of good house design is to be sought. One does not write good poetry by adopting this or that established metrical form, however correctly its prosody is observed. Imagination and good taste can and will assert themselves in and through any style. Simplicity and good proportion—how fundamental they are! and how hard to attain! But it is precisely in these respects that our house architecture has progressed both East and West during the past ten years; a progress that has attracted the attention of so competent an English critic as Sir Thomas Jackson, in the examples he has seen in the Architectural Record. It is the lack of these qualities, sacrificed to a futile struggle after picturesqueness and originality, that disturbs us most in the efforts of the house designers of the 1891-1892 period. It is these qualities that make the distinction of all the best houses shown in this number of the Architectural Record, whatever their style; and it is their cultivation that should be urged on all young architects, to whom exuberance is so much easier than restraint.

A few special features of recent house design deserve mention. There is, for instance, the frequent addition to the main structure of subordinate wings—one might say winglets—at each end, either on the main axis or at right angles to it, as in the Skinker house (Fig. 14), the W. A. Lippincott house (Fig. 26), and the Wyder house (Fig. 43) and others; these appendages serving the practical purpose of porches, sun rooms or the like, and the esthetic end of giving both scale and variety to the composition. One notes also the importance of outside blinds in giving the air of habitableness to houses both of Colonial and of picturesque types, and their singular scarcity in the Middle West and on the Pacific Coast (see also examples in the Architectural Record for October, 1915). The frequent substitution of open terraces and enclosed sun rooms for the old-fashioned piazza has been referred to. The illustrations (Figs. 99-102) present examples of various treatments of the piazza and terrace. The trellis, which for the last few years has been employed as a minor external decoration, seems to have come indoors; appropriately enough, perhaps, in sun rooms (Fig. 99) and such half-open-air breakfast rooms as that in Fig. 98; with more doubtful propriety into interiors properly speaking.

Windows also deserve brief mention; they play an important part in the general effect, not merely by their form and grouping, but by their divisions and glazing. In the Civil-War-Mansard-roof period plate glass of the largest possible dimensions was considered the *ne plus ultra* of fenestral beauty. Then the old Colonial houses taught us the charm of small panes, which our architects have learned to use with discretion. In certain cases, however, where an outlook of especial beauty on sea or landscape demands it, the large plate glass light is resorted to, as in the living room at Larchmont (Fig. 96). The French window

is rarely used except as a glazed door opening on to a piazza or terrace, and the English casement window is by no means common. The objection to these, aside from the difficulty of making them weathertight, is the difficulty of opening them "on the crack" and keeping them so, and the impossibility of opening them slightly at top and bottom for ventilation, as can be done with double-hung sash.

IV.

The interior design of recent country houses offers the greatest possible variety of treatment. I have grouped together a number of interesting stair halls, some with single, some with double runs; the majority being of Colonial type, nearly all spacious, cool and inviting. The American desire for open vistas, for the appearance of space and airiness, is evident in them all. We like to say to our guests as well as to our families: "Here is the day-time living floor of our house, open wide in all its parts to you all." In cold weather we may prefer to shut our doors, but in the summer, the season of country life, we like the feeling of abundant air and unconfined movement.

The appropriate use of wood in interior design appears in the series of views (Figs. 90-94). Wood, as I have previously remarked, is our most characteristic American building material, and can be made to express the greatest variety of effects. In its natural color, or with some modification of staining, it gives richness and warmth and repose to a room, whether used with the charming simplicity of the example in Fig. 92, or with the artistic elaboration of the Tudor interior in Fig. 94. In Colonial interiors it is invariably painted white, and lends itself to a wide range of effects from chaste simplicity to monumental elegance.

The use of tiles and of marble for the flooring of stair halls, vestibules, sun rooms, breakfast rooms and terraces is rapidly increasing. They give an air of coolness to the room and hall, and their durability constitutes at least one signal advantage over wood as a floor-material, especially for those parts of the house subjected to much foot-wear.

The total effect of any interior, whether simple or monumental, depends largely, of course, on its furnishing, and in this respect the progress of the general taste, of owners and architects alike, has been little short of revolutionary during the past twenty years. The subject deserves treatment by itself, and cannot here be entered upon.

V.

The same note of progress appears in the gardening of our modern country houses. It is eclectic in character: England, France, Italy and Japan have all contributed their suggestions, which our landscape artists have been able to adapt, and, where necessary, to fuse together into an art which, like that of the house, can be recognized as truly American. No considerable house is now built without the effort to give it a suitable setting and environment of landscape gardening, designed by experts. This development has come late with us, as has been the case with every nation before us. To return to Francis Bacon, with whom I began these papers, one reads in his essay "Of Gardens" (I quote approximately and from memory) that "one shall always see that when nations come to civility, men learn to build elegantly sooner than to garden finely." But in gardens, in interiors, and in all the variety of form and type of exteriors, I believe we are developing, out of multifarious sources, an architecture of houses which is fundamentally and genuinely American, thoroughly national in spite of the variety of its dress, and increasingly artistic and charming. As one looks through the Country House numbers of the Architectural Record for the last few years, one can hardly fail to be impressed by the beauty and appropriateness of the architecture they present to view: an unfailing index not only of the wide distribution of wealth, but also of a steadily developing refinement of taste. There can be few who would deny that they are at any rate the most comfortable and convenient houses in the world.



The Greek. Ideal in City Planing.

In planning more large cities, there is need of an ideal conception of what a great city may be. It is not well to become too absorbed in the vast mechanism which a city plan is and thus lose the beauty of the ideal that should animate it. For as finally worked out, a city plan is a complex organism, a weaving web of tangled problems always being solved again as the city grows—problems of engineering, transportation, sanitation, economic, political, social, architectural. But this mechanism is after all the body of the thing. What is needed is to remember its soul. Along with the idea of an organism there should be a simpler conception which should stand as a symbol, an emblem to inspire the work and make it seem more real.

To build up such an ideal solidly in our imagination, one which may be sound in reason, and practical in execution, it is necessary to turn to the great cities of history, for from their importance and rich experience will come most of the vision of the twentieth century city.

As the earliest example appears Athens. Other famous communities preceded in Egypt and in Asia Minor, but they belong to civilizations too little understood by us to furnish us with a practical inspiration. Even the most matter-of-fact American may appreciate the capital of the Athenians. He may know it for a centre of civilization, of art, letters, philosophy and manners, rich economically and powerful politically. He will realize that Athens appeared to the ancient world along the Mediterranean as a very dynamo of power, of humanism, of grace and charm, dazzling in her splendid influence. It may be imagined that every galley that entered a seaport was boarded for news of Athens. "What are they doing at Athens?" "What are they thinking at Athens?" the men of the provincial cities might have said; and the women: "What do they wear?" This brings us nearer to the heart of the matter, which is this. Because of her simple classic position Athens typifies the highest function of a great city—to be a source, a spring of civilization that radiates out intelligence and humanity into a barren world, toiling against the forces of nature. This conception of a city as a power house distributing ennobling influence and cheerfulness into the surrounding world may seem a somewhat theoretical one, but it will become significant at once if we compare this old Greek standard with our own nineteenth century American ideal which now in the twentieth century we are only beginning to reject. Consider the score or more of our native cities of population above 100,000. With but few exceptions, did they not rather draw in strength from the adjacent territory than give any strength out? Did they not consume rather than produce, devour rather than create? More specifically in their manufacturing ugliness, sprawling without shape or form, they destroyed the wealth of natural beauty of their sites without thought of offering beautiful human art to replace it and to contrast with it. They drew the manhood and wealth from the country into them and gave little to the country in return. They had few or no ideas to furnish to the country, except in money-getting; it was men from the country who brought ideas into the city. To be sure, cities did offer some benefits in a crude way, as transportation and banking centres or as markets. But how slight these are when one thinks of the gifts bestowed on a neighboring world by Athens!

There is another fact about Athens that should be valuable to American cities, especially those who strive for size. I mean that Athens was not large, hardly more than a town. Thus she proves that

to be great it is not necessary to be large. And furthermore, that a complex organization or city plan, greatly desirable as it is, is still less important than the ideal. Since she was small and the lives of her citizens were simple, she had apparently a simple organization. Not much is said about it, in contrast to the remarkable mechanism that we know was developed in Rome. The ideal in Athens so far outshone the mechanism that it is never thought of. No one ever seeks to inquire whether the Athenian traffic squad was efficient, though doubtless it was handsome enough; nor is it asked whether her sanitation system ended in the fields or emptied into the Piraeus. One's thoughts are directed to Socrates, to Euripides and Aeschylus, to Phidas and the Parthenon, and to the flying galleys carrying goods and ideas over the whole Mediterranean Sea from Egypt to Marseilles. This is her classic, simple unity, as a tremendous source radiating civilization and intelligence throughout the world. Athens stands for all time as a symbol—the ideal of a great city. Let twentieth century America take heed.

JOHN TAYLOR BOYD, JR.

Six Old Salem Doorways, Photographed by Frank Cousins and Described by Phil M. Riley.

The side door of the Boardman - Bowden house, 1 Boardman street, Salem, Mass., the front being 82 Washington Square East, erected in 1785, illustrates well a type of the inclosed porch occasionally seen throughout New England, especially for the more commonly used side door. It provided the early substitute for a vestibule, now usually located within the house proper. The gracefully paneled door is typical of the period in Salem, and the embellishment of the pediment is well proportioned and in good taste. It is related that as Washington passed on horseback on the morning of October 30, 1789, Capt. Boardman, standing on the steps, heard the "father of his country" inquire of his companion: "How can you people build such magnificent houses?" (Fig. 1.)

Despite its seeming architectural inconsistencies, the porch of the house of the late Henry W. Peabody, the great Australian merchant, 19 Chestnut street, erected in 1810, is one of several forming a type as much admired as anything in Salem. Although indicating free use of the orders, its simplicity and grace of line are undeniable. Entablature and pediment are pure Doric in treatment; and while the capitals of the columns may be said to suggest the Doric, the shaft is not fluted, and the base, more particularly the torus, seems to be a Corinthian modification. Unlike this, the columns of many similar porches in Salem rest upon cubical plinths, almost pedestals in effect. (Fig. 2.)

The doorway at 6 Downing street, erected in 1750, presents an effect unique in Salem. It is an excellent example of the broken pediment, with hand-tooled mouldings and fluted pilasters, of which there are several in Salem, but the two-panel door lends individuality, although the repetition of strong verticals results in considerable severity. (Fig. 3.)

The Pickman-Shreve-Little house, 27 Chestnut street, erected in 1816 for Dudley L. Pickman, presents one of the best Corinthian porches in New England. The hand-carved capitals and the fine scale denticulated moulding of the cornice are notable for their precision of workmanship. The leaded glasswork is of particularly graceful pattern and the three-part door, a typical Salem feature of the time, is interesting for the fact that two pieces form the actual door, the third serving to widen it upon special occasions. (Fig. 4.)

The Ionic porch of the Francis Peabody mansion, 136 Essex street, commanded admiration for its handsome surmounting balustrade of wrought iron, the hand carving of the entablature with its ball moulding in the cornice and the conventionalized raindrops in the architrave. Erected in 1820 by Captain Joseph Peabody for his son Augustus, it afterward became the home of Francis Peabody. Prince Arthur of England dined in this house on the occasion of his coming to attend the funeral of George Peabody, the London-American banker for whom Peabody, Mass., was named. In 1890 the house was purchased for the Cadet Armory and in 1908 was razed to make way for a larger structure. (Fig. 5.)

The half-oval porch of the George West house, 25 Chestnut street, presents a distinctly pleasing type for modern adaptation. The proportions are excellent, the detail simple and carefully spaced. The paneled door with its graceful welcoming sidelights and fanlight is broad and typical of the best in Salem. The steps are of granite, with an extremely fine wrought-iron railing. (Fig. 6.)

PHIL M. RILEY.



FIG 1.—SIDE DOOR OF THE BOARDMAN-BOWEN HOUSE, 1 BOARDMAN STREET, SALEM, MASS. 1785.



FIG. 2.—PORCH OF THE HENRY W. PEABODY HOUSE, 19 CHESTNUT STREET, SALEM, MASS. 1810.



FIG. 3.—DOORWAY AT 6 DOWNING STREET, SALEM, MASS. 1750.



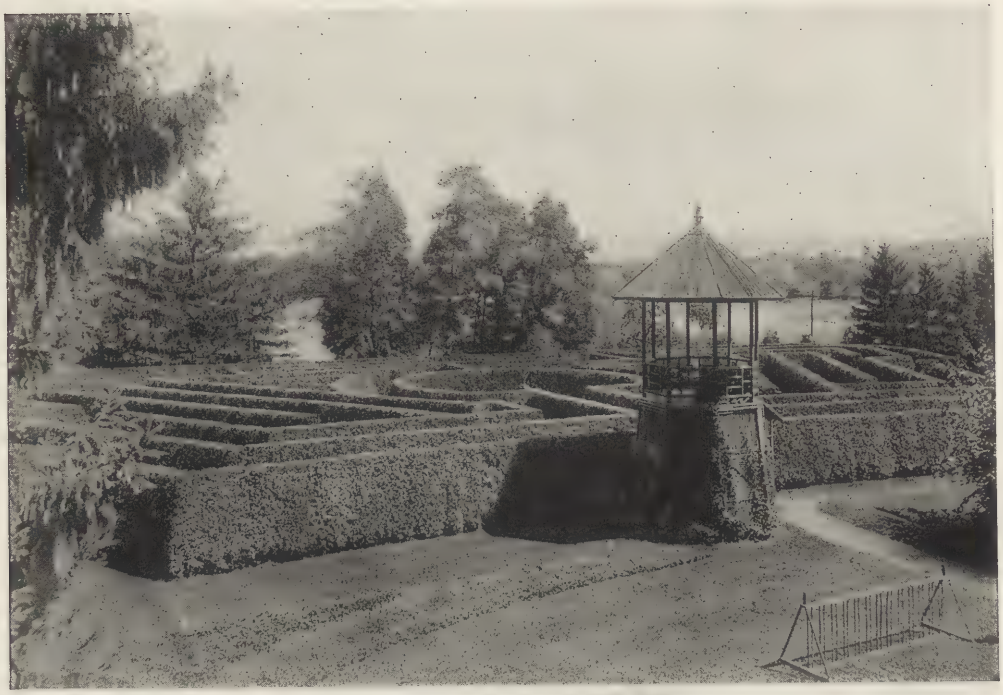
FIG. 4.—PORCH OF THE PICKMAN-SHREVE-LITTLE HOUSE, *27* CHESTNUT STREET, SALEM, MASS. 1816.



FIG. 5.—PORCH OF THE FRANCIS PEABODY MANSION, 136 ESSEX STREET, SALEM, MASS. 1820.



FIG. 6.—PORCH OF THE GEORGE WEST HOUSE, 25 CHESTNUT STREET, SALEM, MASS.



MYSTIC MAZE AT WALTHAM, MASS.

An American Replica of the Maze at Hampton Court.

Many Americans who have visited the famous maze at Hampton Court, England, are aware that America has an almost exact replica. It stands in Waltham, Mass., and is the property of Miss Cornelia Warren. Each Sunday scores of people attempt to solve its intricacies, wandering along the paths, which are walled in by thick arbor vitae hedges. There are about 1,000 of these trees, the first of which was planted in 1896. The maze follows the general plan of the one at Hampton Court, though its rear corners are rounded instead of being angular as in the original. The base line of the Hampton Court Maze is about 222 feet, while the one at Waltham is a few feet shorter, due to the rounded corners.

The total length of the labyrinth is about a third of a mile, and the shortest way to the pond in the center is about a fifth of a mile, but in spite of the short distance many persons wander about for almost an hour or more and many others give up altogether. Once in the middle of the maze, it is just as difficult to reach the outside, so that an employe is in constant attendance waiting to lead out the unsuccessful.

During a recent visit to the original maze in England, Miss Warren believes she found proofs that the garden in Hampton Court is much older than is generally believed. Tradition says that the maze was planted in the reign of William and Mary (1689-1694), but there is evidence that what was done then was only the repair of an existing maze, planted probably by Italian gardeners in the employ of Cardinal Wolsey between 1515 and 1530. It was originally of hornbeam, but now has in it holly, privet, box, yew, hawthorn and sycamore.

ROBERT H. MOULTON.

NOVEMBER 1917

THE ARCHITECTVRAL RECORD



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FOUNTAIN OPPOSITE ENTRANCE GATE—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.

THE ARCHITECTVRAL RECORD

VOLVME XLII NVMBER V

NOVEMBER, 1917

The RESIDENCE of the Honorable HENRY WHITE

WASHINGTON, D. C.

JOHN RUSSELL POPE, ARCHITECT

By *John Taylor Boyd*

A HOUSE that is a fit setting for the life of the diplomatic circle of our capital—such is the residence at Washington of the Hon. Henry White, former ambassador to France. To those who read in the architecture of a building the uses which it serves; who sense in its various unimportant details symbols of the life and of the personality of its occupants, this work of Mr. John Russell Pope is worth some attention. Since our interest in the matter is primarily architectural, we need not pry into the concerns of individuals, but nevertheless some reminder of the peculiar life of diplomacy is necessary to appreciate better the success of the architectural design in expressing so fitly the life of the family of Mr. White.

Only recently have Americans taken much interest in the ways of diplomats. Theirs is a world of cosmopolitanism, of urbanity, of ease, of elegance, yet restricted at the same time by firm conventions of precedent, of traditionalism, of sophistication. Of its less fortunate aspects we are only too sadly aware; they need not be dwelt upon here. At its best or at its worst diplomacy is usually worldly. The spell of the brilliance of the French kings is still upon it, and the manners, somewhat anglicized, of the great Louis, "the most Christian of kings," still gives form to its activities. This is the keynote, the theme of Mr. White's house, and, it may be pertinent for architects to recall, this is also the theme for the decorative setting appropriate for many of our public buildings of executive residence in state and nation. It should be understood, of course, that we must take such generalization as

an indication and not as a formula, for as a formula it has the exaggeration that is bound to result when one sums up in a few words anything so complex as the field of the relationship of nations.

Everything about Mr. White's residence expresses its fitness for its purpose of a diplomat's residence. To begin with, its site was carefully chosen. On a high ridge, in a new part of Washington, the house mounts up, its terraces skillfully adjusted to the difficult, irregular terrain, and so commands from its garden front and portico a beautiful view of the city below. It is an apt coincidence that the house and site correspond in dimensions to that portion of the grounds at Versailles set apart by Louis XV for the Petit Trianon. The first floor is twenty feet above the level of the adjacent streets, and much study was necessary to overcome, by means of retaining walls and ramps, the difficulty of approaching the house from the street. The photographs of the exterior show the high garden terrace above the street, resembling some of the palaces in the city of Rome, and reveals at the rear a bit of the ramp up to the porte-cochère. On page 402 is the fountain at the foot of this ramp of the driveway. Incidentally it should be said that on account of the different levels of the site there are no points of view to afford a good photograph, which is the reason why both house and terrace have in the pictures a blocky appearance that they lack actually.

The exterior expresses a Georgian type of house, rather Italian in its extreme simplicity, in its monumental effect and in the finely perfect proportion and details of its architectural elements. The main reason for the monumental dignity is the high ceilings; the first floor is 14 feet 10 inches and the second is 11 feet 4 inches in the clear, which allows the columns of the porte-cochère and of the garden portico to be impressively tall. Mr. Pope paid great attention to the fenestration; wanted the first story to predominate over the second and yet keep the second one high. On this exterior the capitals and cornice of the order and the balustrade above are exquisitely detailed. Not a line could be changed an inch without marring the effect of the whole—a supreme test of accurate proportions and perfected details. In their profiles they follow rather closely the order of the Massimi Palace at Rome. This striking effect of the exterior is emphasized and set out by the trees and shrubbery which are in turn relieved and emphasized by occasional bits of architecture—an urn or sculptured medallion. The design is carefully restrained, for there is no elaboration of garden furniture and, notwithstanding the monumental effect of the place, the garden has been kept intimate and charming. Fortunately, the design has determined the whole character of the neighborhood that is developing around it.

The plan of the house is apparent from the drawing on page 408. It is simple enough, with large monumental rooms carefully balanced on axes in the same impressive dignity of the exterior. They are evidently meant for entertaining, in the way in which they open up into each other, with absence of small breakfast rooms, isolated alcoves or lounging rooms. Instead of a small suite of dressing rooms, this necessity is provided under the landing of the large stairway, with the lavatory at hand, but placed in the service wing. By this arrangement the entrance hall and reception rooms are kept open and spacious and thus they attain the monumental effect common to the whole design. Indeed, in its extreme simpleness, with all appurtenances eliminated, the plan of the White residence resembles a fine school thesis rather than the usual office plan. Thus it comes nearer to being an ideal plan than is usually achieved in practice.

Upstairs are large bedrooms for the family, one guest room, and the usual appurtenances of dressing rooms, etc., to be expected in large houses. Two unusual features are the bathroom, enlarged to become a dressing room, with closets, and the loggia in the garden front overlooking Washington.

But the most distinctive aspect of the house is the interiors. It is in these that one discerns most clearly the atmosphere of the diplomatic circle. Stately, formal,



GARDEN FRONT—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.

sophisticated, sumptuous, yet with an exquisite classic spaciousness and absence of too much, they are some of the ablest designs that Mr. Pope has imagined. Some of the rooms are Georgian and some are French, especially in the lofty double doorways and in respect to much of the furniture.

The entrance hall is monumentally treated with large Ionic columns in deep relief carrying a strong entablature. In this motive the great technical skill of the designer is evident. He has skillfully omitted the frieze of this entablature and thus concentrated the banding of mouldings at the ceiling, which is exactly where they belong in an interior. The full entablature of complex parallel lines of cornice frieze and architrave—unless in the concentrated delicate forms of early American designs—is frequently too heavy, too mechanical for the inclosing walls of a room. In itself the motive omitting the frieze is a beautiful one, derived as it is from the Erechtheum at Athens. M. Gaudet advocates it warmly, points out that it is a functional form in its constructive logic, and is simpler than the full entablature. One wonders why architects do not use it oftener, for it is truly classic in its freedom from anything mechanical. In this entrance hall the effect of the fine cornice is slightly marred by the sinkage panels in the ceiling inside the oval moulding with sheaf decoration. They might better have been omitted. The more one sees of contemporary American architecture the more one is forced to conclude that it would not perish if the sinkage panel were forgotten entirely. For one case where it is effective there are ten others where it misses fire.

The furnishings of the hall are remarkable, especially the great tapestry enframed by the double columns and flanked by the busts of Washington and Franklin on the axis of the front door. In fact, the furniture and wall decorations—the mirror in the end wall, for instance—seem as perfectly proportioned to the whole room as the architecture is, and the frequent bare spaces of walls and floors provide fine contrast and enframement for them. This same classic purity of decoration is characteristic of the main stairs.

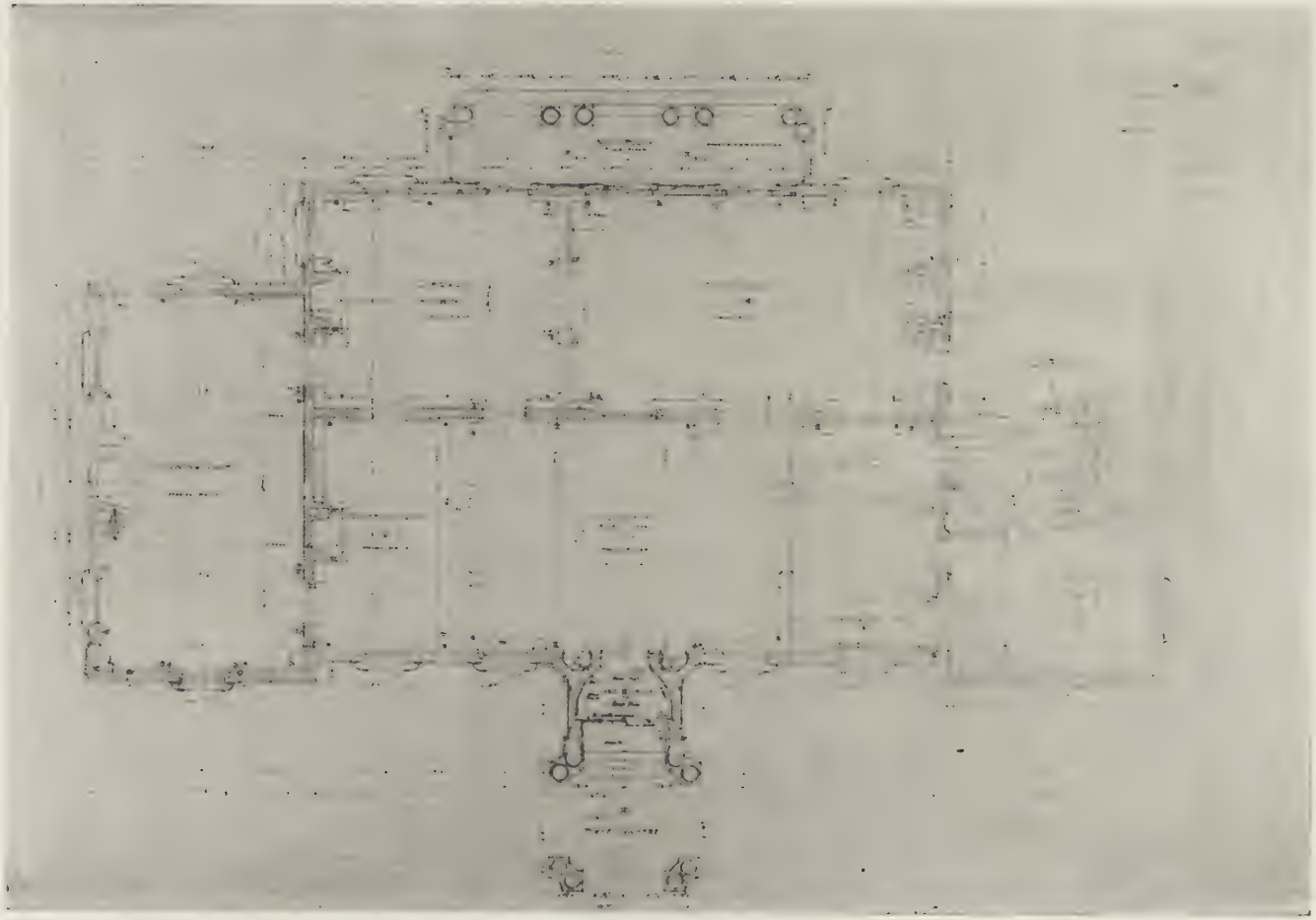
A more richly treated room is the reception room off the entrance hall opposite the stairs. It may truly be called a *salon,* in the French sense of a term that we have come to use less of recent years. It is, however, an English Georgian interpretation of the salon, and, especially in its walls, doors, ceiling and mantelpieces, might have come straight from some British manor house. In it are some pieces of a fine collection of furniture possessed by Mr. White of the type found in the smaller French palaces.

The living room is one of the best in the house, of the same exquisitely proportioned decoration noted in the entrance hall. To some minds the beautiful cornice banding would have stood out in more telling effect if the window heads had been more simply treated, detracting less from their interest. Certainly the vivid, almost Spanish decoration of the chimney-breast seems less mechanical than the view of the end of the room. To others, on the other hand, the end view might seem to have just the touch of formality, of sophistication, that the needs of the design seem to call for. But whatever one may think of this detail, the room possesses a marvelous quality of grace, of lightness, even of cheer and sparkle; just enough points of interest provided to relieve broad wall surfaces without any surfeit.

An Adam design is the dining room, but, let it be said, without the cold mechanical quality and the thinness that so-called Adam rooms often possess. The ceiling treatment characterizes Mr. Pope's great technical skill, with the narrow entablature, the delicate cornice and bed mould and the perfect ornament on the frieze and on the ceiling banding. One detail that proves the freedom of the treatment is that the lighting fixtures are wider than the entablature—very different from the usual tiny fixtures in an "Adam" room. This may seem a trivial matter to some, but to others it is one of the signs of a masterly hand. The portrait over the mantel is of the late Mrs. White and was painted by John S. Sargent.



PORTE-COCHÈRE—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



PLAN OF FIRST FLOOR—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



ENTRANCE HALL—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



MAIN STAIRWAY—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



RECEPTION ROOM—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



DETAIL OF RECEPTION ROOM—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



LIVING ROOM—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



LIVING ROOM FIREPLACE—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



LIVING ROOM—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



LIBRARY FIREPLACE—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE. ARCHITECT.



LIBRARY—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.



DINING ROOM—RESIDENCE OF THE HONORABLE HENRY WHITE, WASHINGTON, D. C. JOHN RUSSELL POPE, ARCHITECT.

Not the least achievement in the design of these remarkably well-detailed interiors is Mr. White's library, which holds his important collection of works on international law and politics. Here the atmosphere is not so formal, and the books themselves form the chief decoration, than which there is no better to be found. The simple detailing of the woodwork, only a few delicate mouldings, the comfortable leather furniture—all is subordinate to the serried rows of books in fine bindings.

Now what is the secret of such extraordinarily interesting and perfected design?

As nearly as one can judge it, the answer is: a sure grace both of architectural decoration and of "interior" decoration—that rather confusing term meaning largely the decoration of furniture, hangings and bric-a-brac. It is evident in Mr. White's residence that an architect's sharpened senses have attained the harmony between these two features of the design and that his ability to realize spaciousness and to emphasize it by placing sparkling bits of ornament in exactly the right spots, is the basis for the result. Unlike too much of the interior decorator's work, it is not overdone, it is not stagy, if it does not seem ready made. When our ablest architects lend their hands to decorating and furnishing their houses they are pre-eminent. Stanford White and Charles F. McKim were masters in this work, and among their contemporaries none can surpass Mr. Platt, Mr. Wilson Eyre or Mr. Henry Forbes Bigelow, men who have maintained an unexampled standard over a long space of years. Mr. Pope is one of those who have continued the high level of the older men, as such decoration as this house of Mr. White proves. He typifies the formal school of contemporary American architecture whose forms are taken from a European past and then somewhat modified to suit our modern conditions and our taste. It will be long before we develop out of our civilization anything so perfect.

In Mr. White's house Mr. Pope has exactly and imaginatively grasped the characteristic needs of the ex-ambassador who lives in the political and international world at Washington, in the cosmopolitan atmosphere of French origin peculiar to diplomats. Is it surprising that *L'Illustration,* the French weekly, describing to French people in a recent issue the tour of the diplomatic mission sent by the French republic to the American people, termed Mr. White's residence, where General Joffre and M. Viviani were housed during their stay at the capital, "a little nook of France"—"un petit coin de France"?



CENTRAL FRONT PAVILION—CENTRAL HIGH SCHOOL, WASHINGTON, D. C. WILLIAM B. ITTNER, ARCHITECT.

The EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO AND THE CENTRAL HIGH SCHOOL, WASHINGTON, D.C.—*William B. Ittner, Architect*

By MICHAEL A. MIKKELSEN

THE high school building is a particularly interesting study. It mirrors the evolution from simpler into more complex forms of that system of popular education which is the great plastic force in the democratic culture of America. Education is of necessity growing more varied in content and more intimate in its relation to the life of the people. The public school has found itself obliged to take over educational functions formerly exercised by the home and by industrial society—functions necessary to a balanced development of the capacities of the child, but fallen into disuse in consequence of fundamental changes in the organization of industry.

The traditional public school education was a discipline of books. It served its purpose so long as the hand industries of the small shop and of the home supplemented this training with the moral and practical discipline derived from sharing in varied home occupations or in serving an apprenticeship to a manual trade. With the displacement of the older industrial order by the factory system, the child lost contact with the materials and processes of industry, a contact which was of the greatest possible educational value when trades were not minutely subdivided and when the worker was perforce both artist and artisan.

The deterioration of the industrial arts in America during the last century, it will be recalled, was contemporaneous with the disintegration of the earlier industrial organization and the failure of education promptly to apprehend its new responsibilities. The rise of the factory system became an outstanding economic phenomenon in America during the second quarter of the nineteenth century; and the Civil War hastened the absorption by the factory of surviving household and small shop industries, besides giving a tremendous impetus to the concentration of factory production in a relatively few industrial centres. Architecture being an industrial as well as a fine art, its history is particularly suggestive. The period of fifty years from 1835 to 1885 has been called the Dark Age in American architecture. But if architecture had its Dark Age, so also had art and industry in general, together with politics and business; ethics as well as craftsmanship suffered from the breakdown of the traditional discipline evolved by the older industrial and social order.

The recovery of architecture was due to the introduction of professional schools of architecture, which multiplied simultaneously with other specialized vocational schools; and presently non-specialized prevocational training was incorporated into the public school system primarily because of its value as a physical and mental discipline and as a help in character building. Theoretically, a non-specialized prevocational course of instruction appeared feasible enough; but as a matter of fact such instruction cannot be devised except for limited groups of vocations. However, if some groups are to have the benefits of prevocational training in the public schools, why not others? Today the tendency is strongly toward specialized prevocational courses and toward providing such courses for greater numbers of vocations.

This tendency is reflected in the recommendations contained in the "Vocational Education Survey of Minneapolis, Minn.," a report of an investigation made by the National Society for the Promotion of Industrial Education in 1915. The report is a document of 592 octavo pages and is published as a bulletin of the United States Bureau of Labor Statistics, Vocational Education Series No. 1 (Washington: Government Printing

Office, revised edition, 1917). The tenor of the recommendations is expressed in this summary:

"A clear pathway for merit of every kind in every citizen of the community might well be the fundamental ideal of organized society. The way should be open for the fullest expression of all the wit, energy, genius, dexterity, skill, taste, technique, and art of every man, woman, and child of every city and town and country place. . . . Not until a system of vocational education has given the mechanic and the artisan, the designer and the decorator, a chance, through training, to develop their peculiar interests and abilities can it be said that the city [of Minneapolis] has opened for them a clear pathway for merit."

The modern educational ideal, of which the paragraph just quoted is perhaps an extreme statement, involves a radical change in the relation of the public school to the community. It ceases to be an isolated institution intended for the child only. Its work is, on the one hand, correlated with that of other educational and child welfare agencies in the community; and on the other, the old principle that every child is "entitled to an individual seat and desk" is abandoned. The number of recitation rooms is kept down, each being used in succession by different classes during the day, in order to find space for workshops, auditoriums, gymnasiums, armories, athletic fields and other modern essentials. Through a schedule which utilizes simultaneously all the facilities for study, recitation, work and play, the number of pupils accommodated is greatly increased; and the per capita cost of education remains within bounds, despite increase in the total cost of the school plant. Furthermore, the school is used for night classes, and its auditorium and other facilities are opened out of school hours for a variety of purposes of a social or civic nature. The tendency toward intensive use of the school plant, both for school purposes and as a community centre, is notably exemplified by the system which William Wirt, Superintendent of Schools at Gary, Indiana, has worked out, an excellent account of which is given by Randolph S. Bourne in "The Gary Schools" (Houghton, Mifflin Co., 1916).

Owing to administrative decentralization, there is no imposed uniformity in American public school education. State boards of education and local school boards within the State have large powers of initiative, which are often exercised with conspicuous ability; and a really astonishing volume of research work bearing on education is being done by public and private agencies, including notably the Department of Education at Washington.

All this freedom of initiative, coupled with widespread expert study, makes for rapid progress in education, a progress which is largely conditioned by the ability of architecture to devise school plants that will admit of extensive additions to the curriculum without a prohibitive increase in the per capita cost of education; and the high school is a particularly difficult problem, because it is upon this school that the largest demands in the matter of prevocational and physical training are being made.

The new high schools illustrated herewith represent architectural solutions of the highest authenticity for two very different sets of conditions. The school at Greenfield, Ohio, is in a small agricultural town and will house 500 pupils. It is the gift of a wealthy public spirited citizen, Edward Lee McClain, to the community; and no effort or expense was spared to adapt it to local needs, Dr. F. B. Dresslar, of the Department of Education at Washington, being called in as an expert educational consultant. The other school is at the seat of the Federal Government and was planned for 2,500 pupils under an appropriation from Congress. Both buildings were planned by William B. Ittner, who is known as one of the very foremost school architects of the country, and are notable examples of compact, economical planning, coupled with distinction of design.

The Central High School, at Washington, D. C., in addition to the traditional classrooms, contains numerous laboratories, shops and other special features of a manual training high school. Its

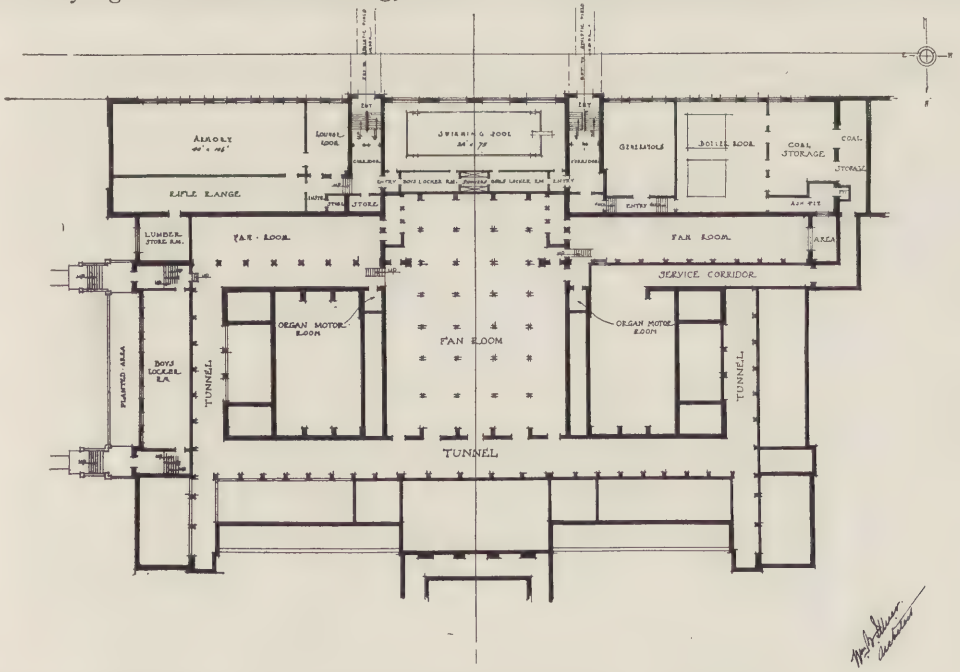
cost, exclusive of the site, was $1,200,000. The site, at the crest of a hill between Florida and Clifton avenues and Eleventh and Thirteenth streets, has a ten per cent. grade from front to rear, which furnished an opportunity for banking the seats of the stadium, shown in one of our illustrations, against the terrace overlooking the athletic field at the rear of the building.

The shops are in one-story wings to the rear of the main building, which contains an auditorium, two gymnasiums, one for boys and one for girls, an armory and rifle range and a complete mechanical plant.

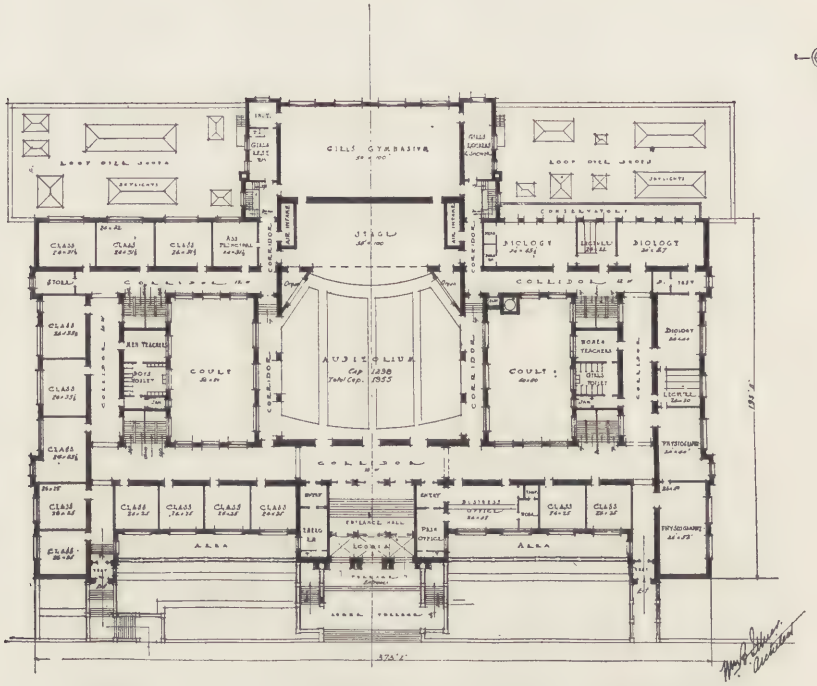
The auditorium seats 2,000 persons; and the stage is arranged as an overflow gymnasium for girls, being of adequate size to accommodate school games, as well as large choruses, and other school functions. The auditorium, upon the first floor, is opposite the main entrance, and is available for the largest community uses.

Each of the gymnasiums is 50 by 100 feet, and has a spectators' gallery and a swimming pool. Side entrances and stairways give access from the gymnasiums to an indoor running track and to the athletic field. A lunchroom, accommodating 800 pupils during one lunch period, opens out into the interior courts seen in the plan. Two of the largest shops are fitted for bench work, one containing twenty-four woodworking benches, and the other twenty-five electrically driven lathes. There is a room for special woodworking machinery, a glueing and finishing room, a large forge room fitted with down-draft forges, a moulding shop, a machine shop, two mechanical drawing rooms and a printing shop.

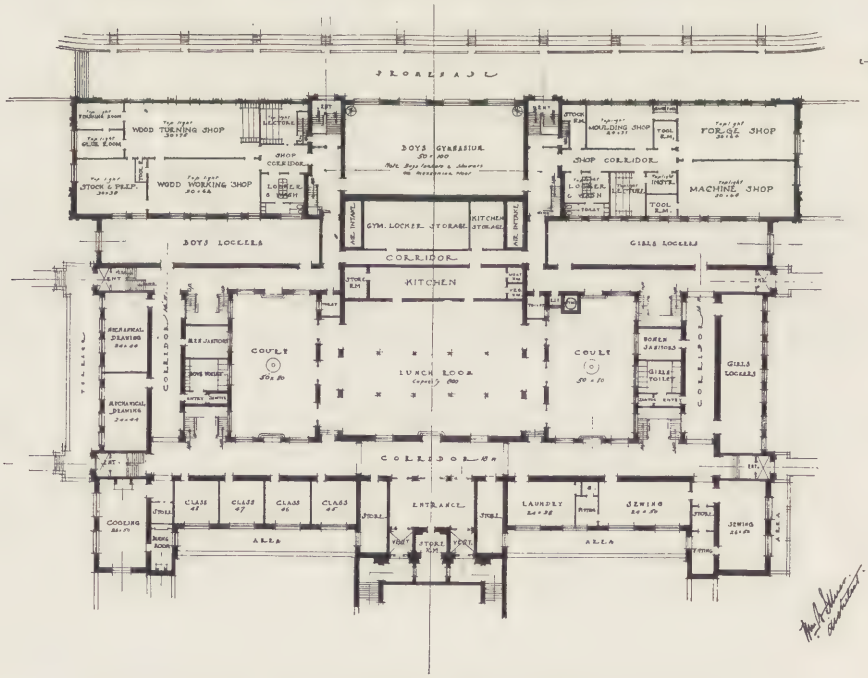
The Domestic Science Department has two cooking rooms and two sewing rooms, together with a housekeeping suite and a laundry. There are laboratories for physics, chemistry, botany, physical geography and biology, all of which are arranged in groups opening *en suite* with lecture rooms and instructors' private laboratories or workrooms. The Commercial Department has rooms for bookkeeping, stenography, typewriting and penmanship, and a large library; and the Art Department has two rooms for freehand drawing, and two rooms



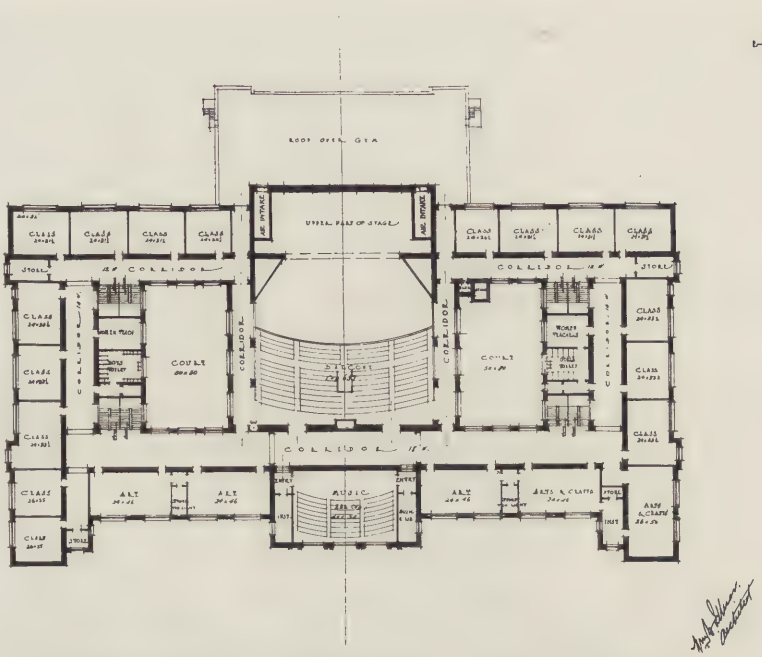
BASEMENT FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



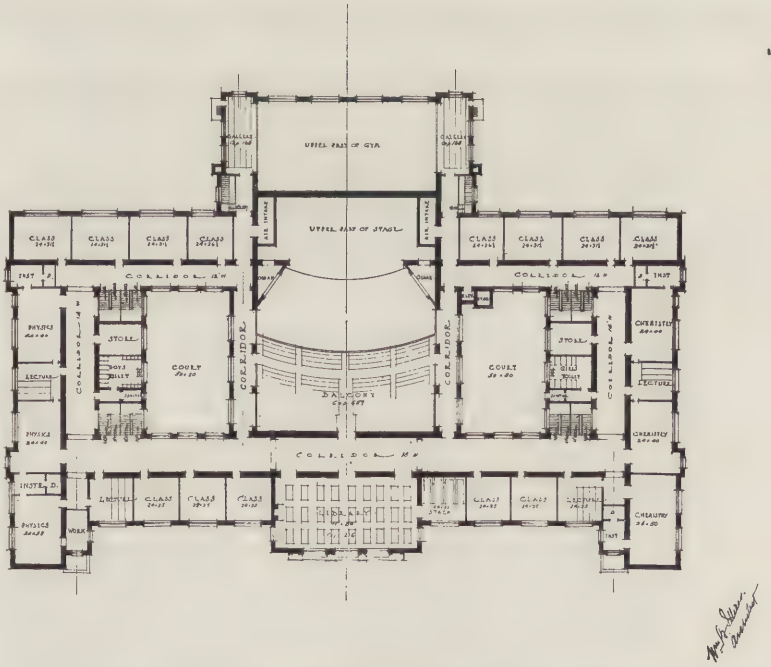
FIRST FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



GROUND FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



THIRD FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



SECOND FLOOR PLAN—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



REAR VIEW, SHOWING ATHLETIC FIELD—
CENTRAL HIGH SCHOOL, WASHINGTON,
D. C. WILLIAM B. ITTNER, ARCHITECT.



GENERAL VIEW—CENTRAL HIGH SCHOOL, WASHINGTON, D. C. WILLIAM B. ITTNER, ARCHITECT.



LOGGIA AT MAIN ENTRANCE VESTIBULE —CENTRAL HIGH SCHOOL, WASHINGTON, D. C. WILLIAM B. ITTNER, ARCHITECT.



MAIN CORRIDOR—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



LIBRARY—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



MANTEL IN OFFICERS' QUARTERS, ARMORY —CENTRAL HIGH SCHOOL, WASHINGTON, D. C. WILLIAM B. ITTNER, ARCHITECT.



MUSIC AND LECTURE ROOM, SEATING 350—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



AUDITORIUM—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



DOMESTIC SCIENCE ROOM—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



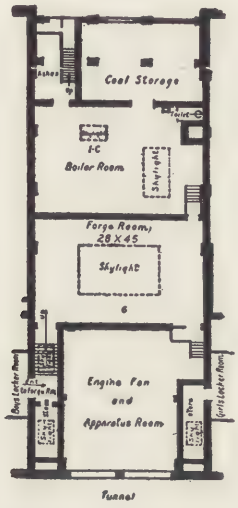
CONSERVATORY IN CONNECTION WITH BOTANY LABORATORIES—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



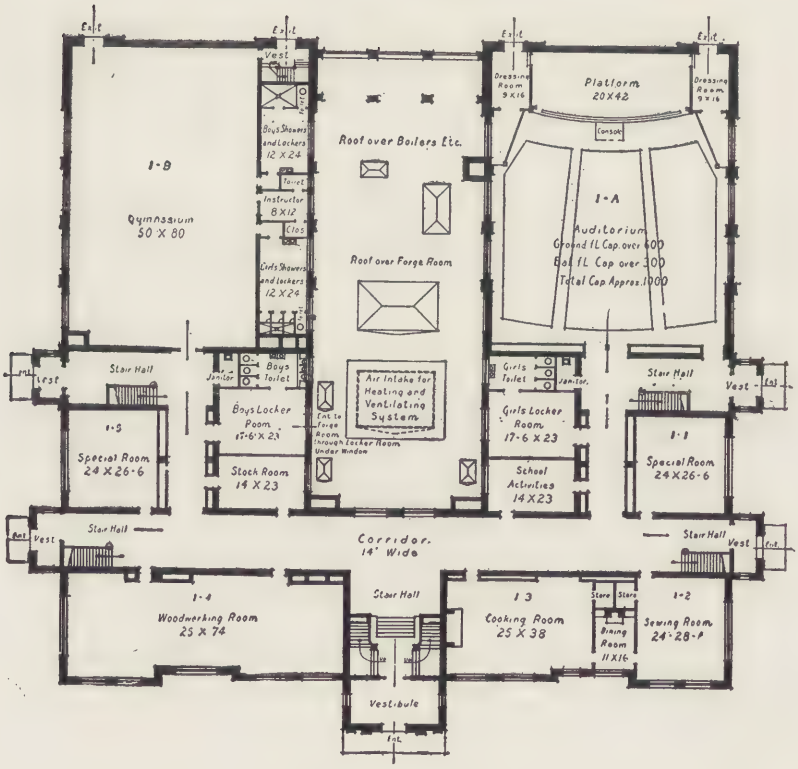
BOYS' GYMNASIUM—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.



INDOOR RUNNING TRACK—CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
William B. Ittner, Architect.

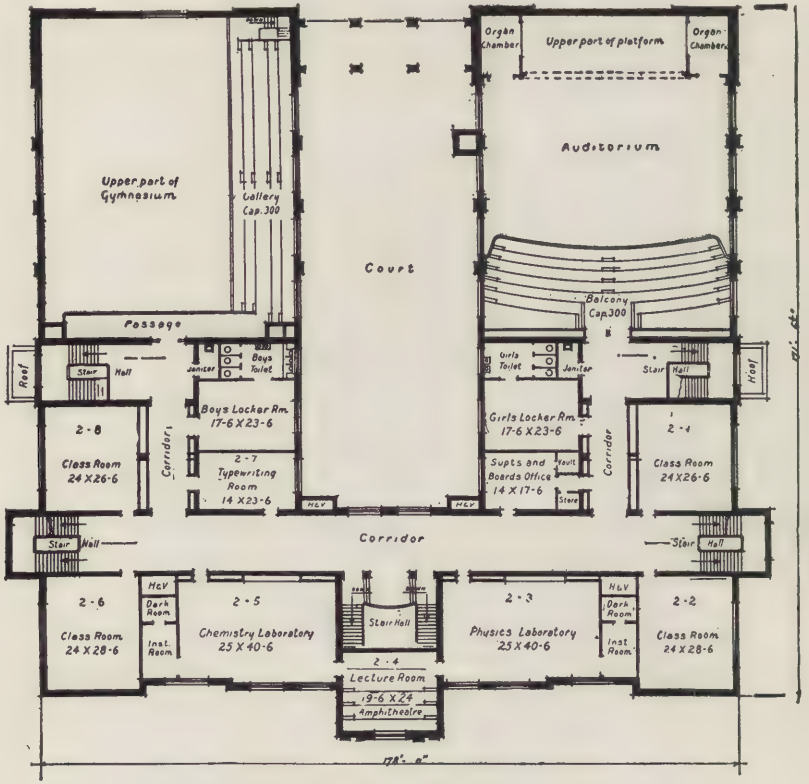


Basement Floor Plan.

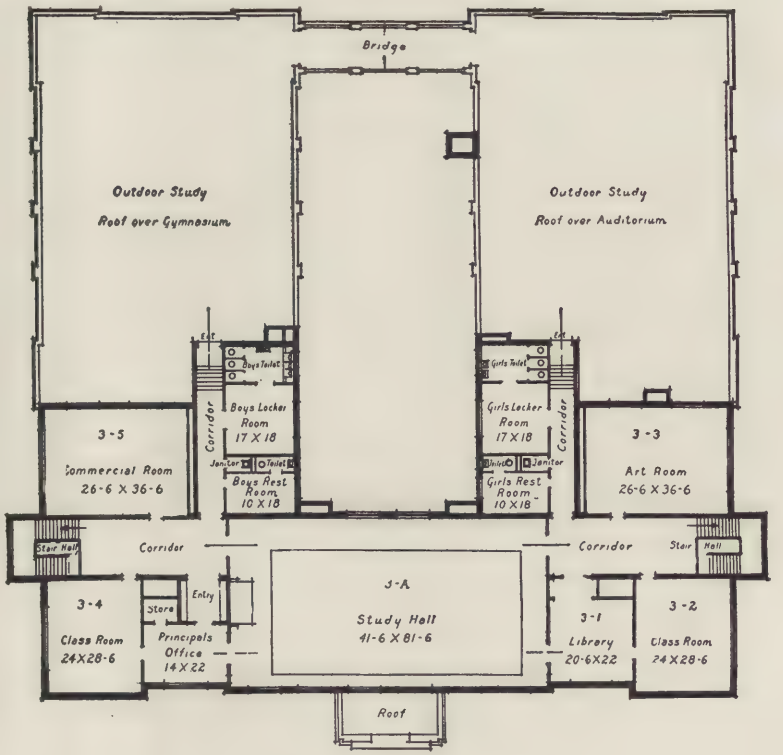


First Floor Plan.

THE EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



Second Floor Plan.



Third Floor Plan.

THE EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



SIDE VIEW, SHOWING ENTRANCE TO SCHOOL AND ENTRANCE TO GYMNASIUM—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



REAR VIEW, SHOWING PLAYGROUND, WITH SERVICE HOUSE AND THE REAR EXITS OF THE AUDITORIUM AND GYMNASIUM—EDWARD LEE McCLAIN HIGH SCHOOL.
William B. Ittner, Architect.



EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO. WILLIAM B. ITTNER, ARCHITECT.



GROUND FLOOR CORRIDOR—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



MAIN ENTRANCE VESTIBULE—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



MAIN FRONT ENTRANCE—EDWARD LEE McCLAIN HIGH SCHOOL. GREENFIELD, OHIO. WILLIAM B. ITTNER, ARCHITECT.



AUDITORIUM—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.



STUDY ROOM—EDWARD LEE McCLAIN HIGH SCHOOL, GREENFIELD, OHIO.
William B. Ittner, Architect.

for art craft work. The general library, upon the second floor, will seat 150 pupils at tables. A music and lecture room, seating 350 pupils, is located upon the third floor.

The mechanical plant includes water-tube boilers, with stokers, an electric light and power plant, a plenum system of heating and ventilation with air washers, a clock and telephone system, and vacuum cleaning.

The outstanding features of the plan are the placing of the auditorium on the main floor, convenient for community uses, without loss of proper correlation with the classrooms, and the provision of outside light and natural ventilation through the use of spacious interior courts to all rooms, including main corridors, which do not face the street.

The dual purpose disposition of the auditorium and the universal provision of outside light and natural ventilation are the outstanding features also of the Edward Lee McClain High School, although its plan is of a wholly different type.

The basement is limited to the space between the two wings formed by the gymnasium and the auditorium. It is covered by a roof at the ground level and is lighted from above by skylights, leaving an open court between the two wings above the ground level. It contains the boiler room, the fan and ventilating apparatus room, a room for coal storage and a manual training room. By placing the forges of the metal-working department in this room, the noise, which has been found so objectionable in schools where this department is located in the main building is eliminated.

The situation of the basement, in a central position, yet outside the walls of the school building, makes for safety against fire as well as for economy of service.

On the ground floor are the wood-working department of the manual training group, the domestic science group, the gymnasium with its locker rooms and shower baths, the auditorium, and various rooms for school activities. The north doors of the gymnasium open to the playground, and the gymnasium as well as the shower baths may be shut off from the rest of the building for community use after school hours or during the vacation period.

The first floor contains the physical and chemical laboratories, with connecting lecture and instructor's rooms, the gymnasium gallery, the auditorium balcony, and four classrooms.

On the second floor are a large study hall, the principal's office, the library, two classrooms, a commercial room, a literary society hall, and rest rooms; the terraced roofs over the gymnasium and auditorium being for outdoor study and recreation.

It is perhaps not customary to speak of the plan of a building as "beautiful," although there is good precedent for so doing. The plans of these buildings by Mr. Ittner have the beauty inherent in a compact correlation of functions, the sort of beauty one admires in an intricate argument logically and clearly expressed; and this beauty of clear and logical thinking has been extended to the design. The exterior is an outgrowth of the plan without adventitious elements. The language of the design is consequently modern and American, although written in the Renaissance alphabet, and is calculated to stir the imagination of the child. The interior decorative treatment is of the same purposeful order, as is evidenced, for example, by the use of plaster casts in the main entrance vestibule and in the ground floor corridor of the McClain High School.



THE CIRCULAR GARDEN—THORNTON MANOR.

THORTON MANOR, CHESHIRE, ENGLAND

The HOME OF SIR WILLIAM H. LEVER, BART.

By Thomas H. Mawson

THE stately homes of England, showing as they do the result of generations of fine keeping, have one and all an intrinsic merit which is not their chief or only charm. Their unequaled attractiveness arises from the fact that, writ large upon their very stones for all to read who have the necessary insight, are the pages of the history of our country. One and all, the men who have lived there have been soldiers, statesmen, patrons of art and of letters and upholders of the fair name of their country in many lands, and usually we find that the present holder of a manorial estate is filled with a deep sense of his responsibility as of one entrusted with a great national asset. Undoubtedly such treasure houses as Chatsworth, Haddon or Blenheim are not alone national assets, but they enshrine the heritage of generations of illustrious ancestors.

In turning to consider a comparatively newly created domain, one is curious to discover whether, by contrast, it will appear lacking in interest or association. We shall find that this depends almost entirely upon the personality of the man who has built it, and in very many cases, as will be evident from a moment's consideration of the conditions under which

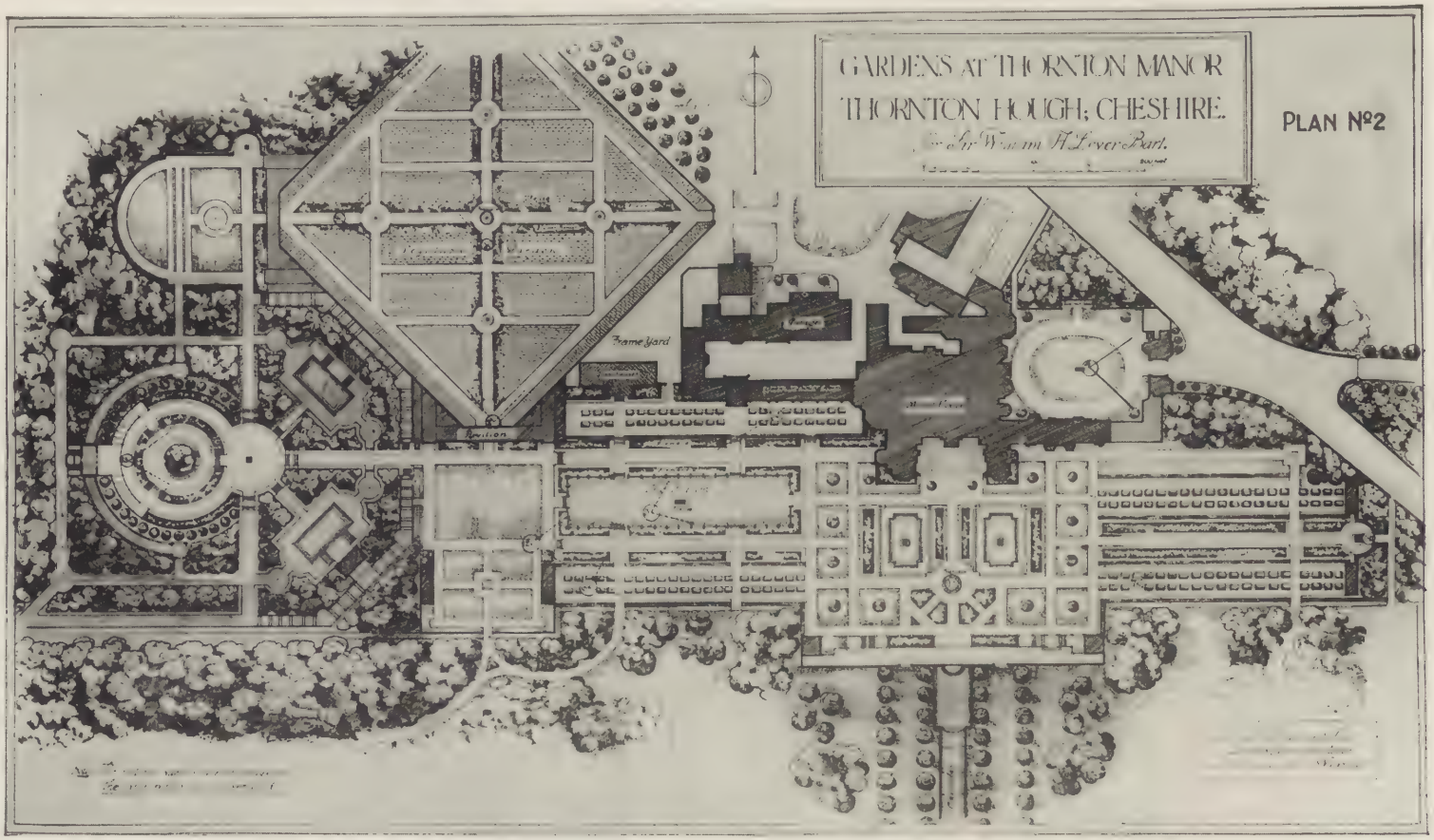


FIG. 2.—PLAN OF GARDENS—THORNTON MANOR, CHESHIRE, ENGLAND. THOMAS H. MAWSON & SONS, LANDSCAPE ARCHITECTS.

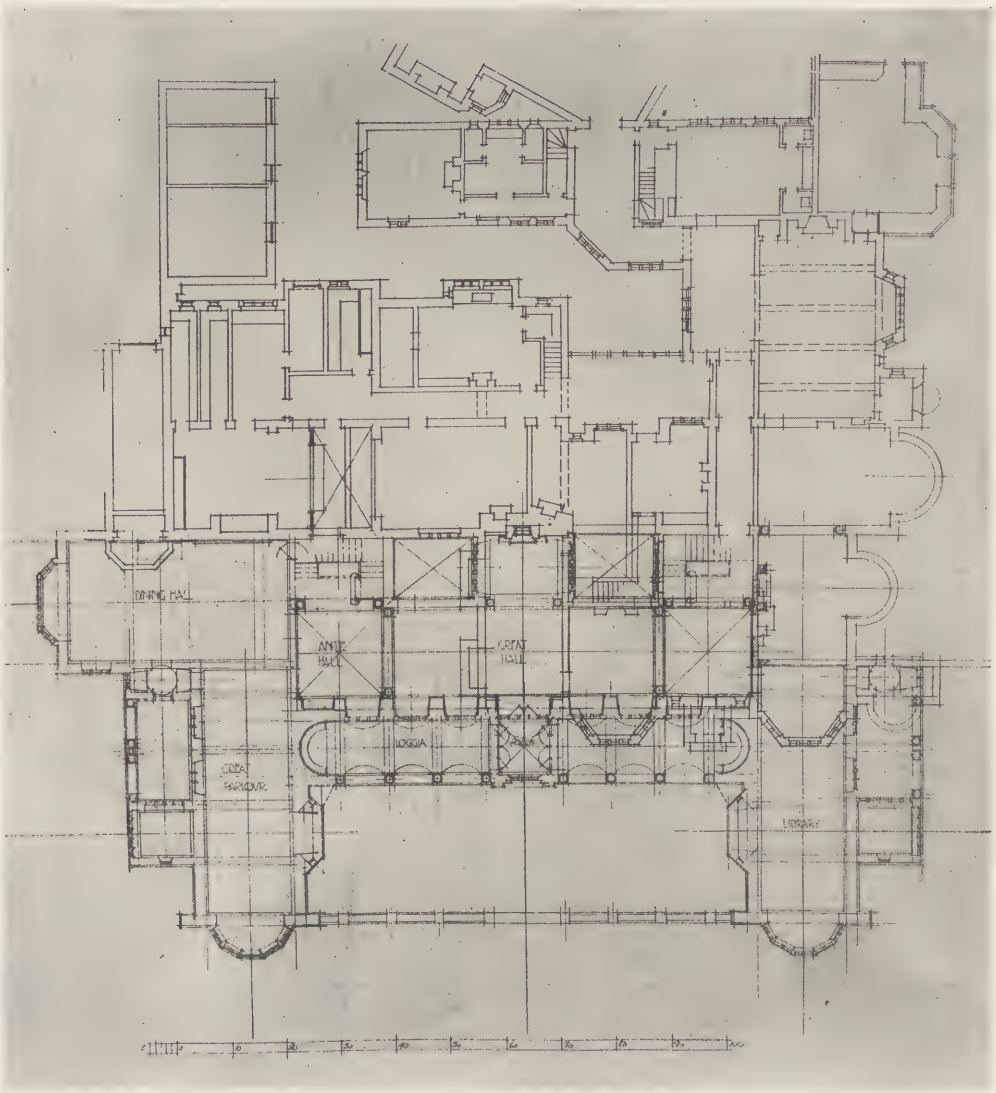


FIG. 1.—GROUND PLAN OF THORNTON MANOR, RESIDENCE OF SIR WILLIAM H. LEVER, BART., CHESHIRE, ENGLAND. THOMAS H. MAWSON & SONS, LANDSCAPE ARCHITECTS.



FIG. 3.—SOUTH SIDE OF FORUM—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

these new domains arise, we shall find that they are produced by men of strong and vivid personality. We shall also find that these men, Englishmen to the core, who, while on the one hand they are true to the great traditions of their ancestors, yet on the other in their domains, whether these are entirely new, old, or remodeled, have adapted them to the altered circumstances of a more democratic age.

This is particularly true of the domain in the photographs accompanying this article. The owner, Sir William Lever, Bart., needs no introduction; his name comes vividly before the mind whenever the relationships between employer and employed are under consideration, as a man who has done more to show what these relationships should be than probably any one else in history.

We should therefore expect to find this prominent characteristic expressed in the arrangement of his domain, and we are not disappointed. While the ancestral homes of England were designed for the entertainment of the influential compeers of their owners, and were virtually the administrative centres of a feudal system which in its best aspects has survived almost to the present day, we find, in the case we are considering, evident everywhere a desire that all, from the highest to the lowest employed by the great industry of which Sir William Lever is the head, shall share the beauties produced by, and benefit from the money obtained by, the united efforts of employers and employed.

Quite naturally Thornton Manor is situated within easy distance of the beautiful industrial village of Port Sunlight, which its owner has created for his workpeople.

The village of Thornton Hough, which lies almost at the entrance of the Manor park, has, like Port Sunlight, been laid out as a garden village, on which nothing which in an architectural sense is unseemly has been permitted to remain. This village, which is replete with fine schools, public institutions and one of the most beautiful modern churches in England, has been almost



FIG. 5.—LOOKING ALONG PLEACHED ALLEY TOWARD HOUSE—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.



FIG. 4.—INSIDE OF FORUM—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.



FIG. 6—PLEACHED ALLEY AND OPEN DINING ROOM—THORNTON MANOR, CHESHIRE, ENGLAND.



FIG. 7.—WESTERN END OF PLEACHED ALLEY—THORNTON MANOR, CHESHIRE, ENGLAND.



FIG. 8.—KITCHEN GARDEN, FROM ENTRANCE—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

entirely rebuilt, and it may be added that almost every unit it contains is worthy of illustration; but, as the purpose of this article is a short description of the Manor gardens, we can give no illustrations of the church (Congregational) which occupies a dominating triangular site in the centre of the village.

The Norman style adopted by the architect, Mr. John Simpson, admirably suits the stone of the district, which is a soft salmon-colored sandstone; incidentally, the massiveness of the style seems to suit the somewhat austere character of Congregational worship.

When originally purchased by the present owner, the estate was of moderate size, and the residence quite small in comparison with the present Manor; but by subsequent purchases it is now of considerable extent and architectural importance. The Manor house, like so many English houses, has grown by stages, so also have the gardens, and both are now on a scale comparable with the traditional country seats of England.

Although not carried out exactly to this plan, illustration No. 1 indicates approximately the latest extension, which includes new dining room, great parlor, an extended great hall and a new library. The dining room, which is at the east end, is connected with a large open-air dining room, and it is proposed eventually to have a balancing wing which will extend westward from the library. This extension will completely enclose the carriage court on its south side and probably connect with the gate lodge.

Plan No. 2 shows the layout of the gardens immediately adjoining the house, and the area within which the photographs illustrating this article were taken. Beyond the area shown, however, there is the home park, which includes a lake of about 13 acres, with miles of shrubbery, walks and woodland groves, and the views within this larger area might form a fitting subject for a further article. For the present it is sufficient to say that, beyond the formal gardens, there is a greater freedom of treatment, and that much of the ground



FIG. 9.—VEGETABLE GARDEN, LOOKING TOWARD HOUSE—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.



FIG. 10.—CENTRE OF VEGETABLE GARDEN—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

is laid out in a picturesque manner, in what is known as the landscape style.

On the east side of the public road which connects with and passes the gatehouse, several miles of new avenues have been laid out, each planted with a double line of trees on either side of the roadway; these not only add a great charm to the estate, but give direct access to Port Sunlight and other parts of the property.

As already hinted, the gardens are not intended solely for the use and enjoyment of their owner and his family. As a model employer of labor, the proprietor of Port Sunlight frequently entertains his directors and managing staff, his representatives, and also his workpeople of all grades at the Manor, a fact which has greatly influenced the plan. The functions which have called for most consideration in the layout of the gardens are the garden parties and entertainments which are provided on a lavish scale for the children of Sir William's model villages. When it is stated that the guests at each of these children's garden parties number at least two thousand, in addition to teachers, welfare workers, friends and visitors, it will be seen that the layout calls for a breadth and scale of treatment, with a corresponding width of walks and open spaces, much greater than what is usual in a purely private garden. The Forum, for instance, illustrated in view No. 4, is a necessity imposed by the dual use of these gardens, for in our variable climate provision must be made for wet days, and here with the surrounding columns is erected a huge tent capable of seating at least 2,000 persons. The gaily striped tent, with its surrounding columns and rose covered treillage, makes a most picturesque addition to the gardens. View No. 4 shows the inside of the Forum without the tent.

On further scrutiny of the plan it will be evident that there are an abundance of summer houses and accommodation for shelter and rest in excess of the requirement of a private garden. They are purposely provided for the visitors and the children who come in great numbers to the social functions.

On approaching the gardens the first feature which strikes one is the new gatehouse, designed in the traditional Cheshire half-timbered style, carried out in oak, adzed in the manner usual in the old Cheshire work and roofed with stone slates. This gives access to the carriage court, which is large enough to accommodate a considerable number of automobiles. In passing, it may be noted that the façade of the house, which looks on to the gatehouse, may undergo some improvement after the war; in this event the conservatory seen through the archway will disappear.

Although commanding magnificent prospects, the south and main front is very wind-swept, there being but little protection between the gardens and the Welsh mountains twenty miles distant. This has proved another factor in deciding the type of layout. Here the long pleached lime walks, which form so charming a feature of many of our old-world gardens, have been planted. The views Nos. 5, 6 and 7 were taken the year after planting, but in a few years the trees will form dense overarching canopies of greenery, and even in the winter season will make very effective wind screens. Esthetically they provide extended green wings to the house in the same manner as those planted about the French chateau.

View No. 6 is the pleached walk, which is central with the dining room and the side entrance to the fruit and vegetable garden. Behind the trees on the right of the picture is seen the open-air dining room.

The fruit and vegetable garden, which, with the connecting frame yards, extends to about two and a half acres, is unusual in plan, being set anglewise on the ground. As is common in English gardens, this utilitarian department is treated decoratively. The reason for this is that in the late winter and early spring months this walled-in enclosure is the most favorable place for a sheltered walk; and here, therefore, are always to be found the earlier spring flowers, to be followed by masses of roses and herbaceous plants which love the shelter of an enclosed area. The two views, Nos. 8 and 9, show the garden pictures which



FIG. 11.—VIEW FROM ESTATE, WEST OF PLAN—THORNTON MANOR, CHESHIRE, ENGLAND.
Thomas H. Mawson & Sons, Landscape Architects.

meet the eye from the two principal entrances, and No. 10 is taken near the central fountain. French espalier trained fruit trees form a prominent feature of the garden. They are at once both decorative and productive; and, in fact, this method of training fruit trees may justly be described as providing one of the most successful experiments in intensive cultivation.

View No. 11 commands the prospect across the terrace from the bottom left-hand corner of the plan looking down the main terrace walk with the Forum in the distance.

The remaining views illustrate portions of the garden which are as yet incomplete. The one showing the south side of the Forum (No. 3) will probably have a balustraded connection, with the Forum on one side and a garden shelter on the other. The view on page 442 is of the rose garden; but this again merely indicates the ground work, for, as will be seen from the plan, it is intended to have a circular pergola with a central garden pavilion to close the main visual axis.

At a later stage in the development of this interesting English country estate, I hope I may be able to give illustrations of the placid lily ponds which reflect the gables of the south front and also of the steps and balustrades which have already been planned, in conjunction with them, but which, like so many other desirable projects, must wait until the war—the prosecution of which is our main business—is brought to a victorious conclusion. Before closing let me emphasize what I have already stated—viz., that while they are private property, the charms of these gardens are generously shared by the owner with his neighbors and workpeople, and all that is asked in return is respect for that which is shared and a reverent attitude toward the works of the Creator.

Since my writing the foregoing article Sir William Lever has been elevated to the peerage and has taken the title of Lord Leverhelm.



ARCHITECTVRAL POLYCHROME DECORATION

An Analysis of Fundamental Principles

By

LEON V. SOLON

LITTLE success has so far rewarded contemporary efforts to revive the use of polychrome decoration in architecture. Perhaps, therefore, it may be of some help to analyze current methods, to ascertain the value of the elementary principles guiding practice, and also to examine carefully the types of decoration adapted to polychrome treatment.

Of recent years the Italian Renaissance has exercised a powerful influence on architects in this country, and many of the essays in polychrome have followed Italian models.

There is meagre evidence to prove that the Italian Renaissance architects regarded color as a desirable adjunct to their major schemes, so far as exteriors were concerned; in fact, it is doubtful whether they had much sympathy with its use. Classic ideals found expression in an intense effort to achieve purity of contour, severity of detail, and exquisite proportions based on Greek and Roman standards. It was not generally known that pigment had once illuminated many of the fragments from which their inspiration was derived; hence, it is most unlikely that the architect, reacting from Gothic emblazonment of color to classic austerity, would risk the use of an element calculated to disturb that serenity for which he strove.

In reviving the use of classic ornamentation the Renaissance designers adhered faithfully to motif and detail; the pronounced difference that is apparent in their interpretation is due to the influence of their esthetic aims, not to a deliberate modification. When they chose to relieve the severity of their façades with carving, their taste was best satisfied by relief modeled with subtle gradations of light and shade, with soft edges melting into the field on the light side and abrupt projections casting clearly defined shadows in contrast.

The general tendency to avoid any precise definition of mass-forms is a strong argument against such ornament having been intended for color application.

The fact that the Greeks used polychrome to a considerable extent is amply established by archeologists; but, so far, sufficient information has not been accumulated to determine the exact extent to which it was applied to each architec-



DESIGN FOR POLYCHROME FRIEZE IN GLAZES FOR EXTERIOR OF THEATRE. IN ATHENIAN MANNER, SHOWING APPLICATION OF FILLET OUTLINE TO FIGURE DECORATION.

tural unit during the evolution of the orders.

Many ornamental details standardized by Greek builders, in the stone carving, were simultaneously used by other craftsmen. Examples of painted Greek ornament exist today in their original form and can be seen on the beautiful vases made by the Greek potters. These contain much varied data that can be used as a basis for studying the conformation of detail and mass prepared solely for color effect. Comparison of detail so contrived, with corresponding carved versions of a certain technique, shows how the principles formulated by the color designers were followed by carvers when color was to be added. Pronounced differences exist in the treatment of the same motif or detail when produced for light and shade, or color, pointing in the latter case to a complete subordination of the carver's methods to the technical limitations and peculiarities of the painter's media. Ample proof may be deduced that basic principles were recognized and rigidly observed by artists working for the one effect or the other.

In analyzing the colored ornamentations on the Greek vases the foremost characteristic striking us is that form is primarily expressed by silhouette, decorative rhythm and contrast being attained by careful calculation of the relative value of motif and field.

Turning for comparison to those Renaissance carvings which, we assume, were created for light and shade only—this partly from the experience that no planning of color can produce a balanced result—we find that silhouetting of form is a matter of minor importance, and that the fashioning of planes, modulating passage of light, is the element of effect.

In ornamentation of this type, a detail, by varying the angle of its direction, the height of its embossment, and the treatment of its edges, may pass through all the modulations existing between high-light and shadow; this alone is almost sufficient to invest a form with interest, which in plan or mass would hardly invite attention. Any insignificance in decorative mass or lack of symmetry, which is unobtrusive in such relief, is accentuated by coloring.

Light and shade, which is a common factor uniting all items in the uncolored version, is an element of disunion in polychrome, as the shadow-strength varies with the tone value of each tint.

In carvings prepared exclusively for light and shade, height of embossment is of greater importance than area of mass, the main motif of the composition asserting itself by accentuation of relief; but, if this design is treated in polychrome, the main motif has little more prominence than a secondary detail of equal area, resulting in a depreciation of decorative effect in the designing by a confusion of values.

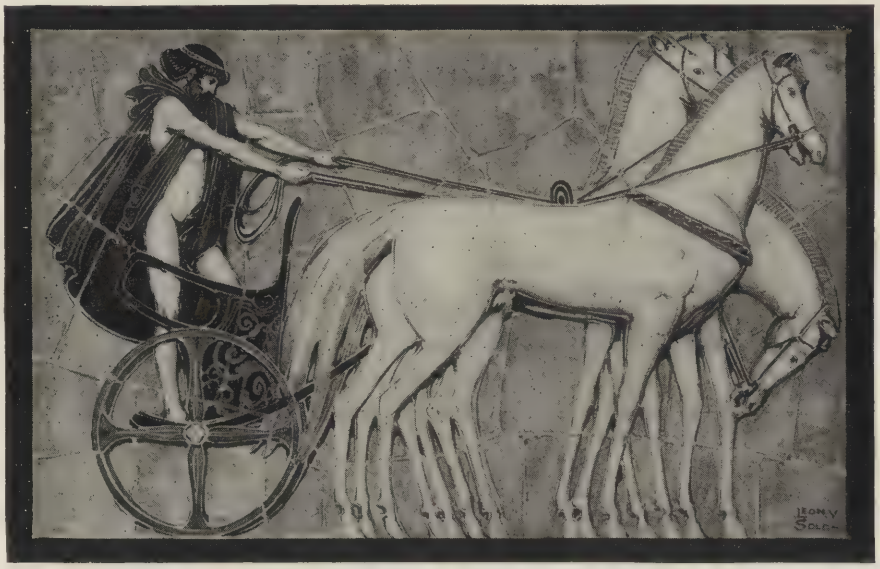
Failure to grasp the fact that designing for color requires a special form of ornamental planning has been the most serious factor retarding the advancement of architectural polychrome. This effective method has a far higher import than any that can be realized by a casual tinting of embossment prepared for other purposes. The legitimate effect can only be attained by an interweaving of tints, produced by arranging their recurrence at chosen intervals. The contrasts of tone, area and tint, constituting the harmony, are the result of judicious planning and distribution of detail, assembled with the sole object of achieving color balance. These intricate essentials absolutely control success in polychrome design; it is consequently obvious that only by an exceptional hazard could ornamentation designed for light and shade be arranged in such manner as to serve satisfactorily for polychrome.

A review of modern attempts justifies the conclusion that this form of decoration is not yet recognized as a distinct art, with a specialized technique and a code of laws governing taste.

Our first instinct, when needing instruction or enlightenment in art matters, is to turn to the classics. Unfortunately, on the subject of color this resource is not available. To expect that more extensive archeological discoveries could provide us with the means to

formulate good and safe rules for our guidance in the use of color would be an excessive indulgence in optimism.

The limited range of colors at the disposal of the ancients would, in all likelihood, be adjudged by our standards crude and inadequate and probably yield no more satisfaction to the eye than a Greek chorus would to the ear accustomed to the intricacies of Wagner.



DETAIL OF FRIEZE FOR A PUBLIC BUILDING.
The drawing shown here in half-tone for convenience of reference from the text is reproduced in color on the cover.

Those rare instances in which we have reason to congratulate ourselves on our superiority over the ancients, in matters appertaining to art, have usually reference to some accessory method which has been subjected to scientific development, such as, for example, the manufacture of pigment. Our resources in this respect far surpass those of the Greeks, so that little advantage may be expected from an acquaintance with classic precedent on a subject in which attainment was necessarily immature.

Our energy will find full occupation in separating from chaotic confusion those tints that are capable of producing harmonies consistent with architectonic dignity; these requiring to be adjusted in such order that they may be used without disturbing established proportions and applied to detail without giving it undue prominence or misplacing emphasis.

We find much evidence in Greek remains of the vast importance attached to such esthetic subtleties as, for instance, the adjustment of perspective when it interferes with horizontal or vertical lines, or compensation for the apparent diminution of mass when silhouetted against the sky, showing that many items too subtle for our superficial observation were taken into consideration and provided for. These facts encourage one to believe that a scrutiny of Greek ornamental sculpture may reveal solutions to some of the difficulties besetting us when we attempt the combination of color and relief.

An examination of ornamental sculpture decorating buildings erected in Greece during the fourth and fifth centuries, B. C., when polychrome was extensively used both in architecture and sculpture, reveals a number of examples carved with a very distinctive technique, differing essentially from the conventional renderings of such motifs, by the manner in which the edges of reliefs are treated.



ROMAN ORNAMENT IN VATICAN MUSEUM, SHOWING CHARACTER OF CARVING WHEN POLYCHROME DECORATION WAS NOT INTENDED.

Examples of this type are found on many of the finest buildings of the golden age, on the Parthenon, on the Erechtheum, and on others, of which fragments only remain. The peculiarity of this method is that the contour of the forms is bounded by a narrow, delicately embossed fillet giving additional projection to the edge,* which distinguishes it from carving made for light and shade, with its tendency to efface edges on the light side.

Esthetic difficulties do not confine themselves to any period or race. There is no doubt that the problems which beset us, in combining color with relief, were just as formidable to the Greeks. They must have experienced, as we do, that color applied to carved detail, executed in accordance with the usual conventions, had unpleasantly hard edges and a tendency to make the object treated look unsubstantial and detached, and that attempts to rectify this by color outlining or tone gradation were not satisfying. There is little doubt, in the writer's estimation, that the Greeks devised the fillet treatment of edges as the remedy for this defect, which it completely neutralizes, and with which, incidentally, a very beautiful type of ornamentation was developed.

The light falling on the raised edge of the fillet, accentuated by its delicate shadow, adds an appearance of richness

*Winklemann, in the eighth book of his "History of Ancient Art," notes this treatment, but draws no conclusion as to its purposes. In describing funeral urns in the Capitolene Museum, Borghese and Albani villas, he says: "These reliefs, which are particularly elaborated, are distinguished by a raised edge or prominence passing around them."



ANTHEMION FROM ERECHTHEUM.



ANTEFIX FROM PARTHENON.

SHOWING TREATMENT OF EDGES WHEN POLYCHROME APPLICATION WAS INTENDED.

and softness to the colors which is unattainable by other means.

The fillet edge on the antefixes of the Parthenon is used with much judgment, for the purpose of preserving color value from encroachment by strong rays of light from the sky behind. In the anthemion of the Erechtheum we find a magnificent specimen of the peculiar type of decoration evolved on this principle, which shows the freedom of its application. In this carving, the unerring instinct which invariably guided the Greeks in these matters caused them to modify and even omit the fillet in places where its presence might detract from the elegance of ornamental growth.

This method has just as great a value now as then and is admirably adapted technically to the material in which the hopes of polychrome are centered—glazed clay products. The fillet outline would act as a cloison for the colored glazes; this method, having been identified in other branches of ceramic art in many countries and periods, could not be open to the imputation that it was a technique borrowed from another material to which it exclusively belonged.

Frequently terms applied to matters connected with art have a significance conveying much more than is included in their bare definition, this being the result of mental association with eminent achievements they have designated during generations. The word "polychrome" in its architectural application cannot, unfortunately, be included in this category. Traditions from which it might have gathered prestige have only recently acquired substance through the enterprise of savants rather than artists. In this country architectural works of such a nature represent experimentation rather than inspiration; they constitute, as a general rule, the demonstration of a principle, cramped for want of an essential technique and lacking the means for poetic expression through undeveloped color facilities.

The majority of these schemes have been executed in terra-cotta, with the limited assortment of tints obtainable by the single-fire process, precluding any subtle combinations or varied harmonies. This vital question is unfortunately controlled by commercial considerations, which for the moment are a serious obstacle to progress. As only a comparatively small proportion of the total area of a façade would generally be decorated in polychrome, it is to be hoped that architects may recognize the necessity of leaving sufficient financial margin for the manufacturer to develop and utilize this invaluable asset.

The prime reason for this condition is not so much parsimony on the part of the purchaser as the fact that the intrinsic value of color has not been firmly established by works in polychrome of a convincing nature.

Spontaneous recognition can only arise from proof of merit; when once this is firmly asserted, the considerations at stake will appear too precious to discard for a trifling difference of cost.

Good things in art have a currency of their own, in that they carry conviction of their worth even among those having no comprehension of their nature.



HÔTEL DE VILLE, ARRAS. RIGHT (MODERN) WING SEEN FROM THE GREAT SQUARE.

The DESTRUCTION OF HISTORIC BUILDINGS AS REVEALED *by the* OFFICIAL FRENCH WAR PHOTOGRAPHS



By THOMAS E. TALLMADGE

II.—Arras

THE fate that overtook Arras, the smiling and ancient capital of Artois, is typical of that which has befallen other French towns, and which is likely, alas! to befall others now enslaved but still happily intact.

The course of their undoing seems to run about as follows: The Germans in a successful advance occupy the unresisting town; elated with their success, besides the usual petty military exactions and billeting they do no damage; the fighting, as long as all goes well, is done fairly as in combat between brave men; then comes the check, next the reverse, and then the retreat; the Germans, compelled to withdraw from the gentle village which has given shelter and done them no harm, in wrath and exasperation, turn their guns on those lovely Gothic towers, that quaint Hôtel de Ville, the Great Square, and all the beloved "foyers" of its trusting inhabitants, and what has been for generations out of mind a thriving and hospitable town, within a few days has become a hideous pile of smoking débris.

At the end of August, 1914, the French, after the battle of Charleroi, retreated, evacuating the north of France as far as the Seine. In this advance the Germans appeared before Arras. That there might be no excuse for destruction, the town being unfortified, all the men of military age withdrew, leaving the town in possession of the old men, the women and children. The Germans entered Arras September 6. They respected the city and its inhabitants, and did no recorded harm. Then came the battle of the Marne. Fearing a surprise attack, the Germans evacuated the city and entrenched a league distant. In the fighting about Arras the French themselves bear witness to the bravery of the enemy. After a month, however, of indecisive and desperate fighting the Germans, realizing that Arras had slipped from their grasp, and actuated by a diabolic desire for revenge, or in conformity with their political dogma of frightfulness, brought up their siege guns, and at nine o'clock on the morning of October 6 the first shell was fired into the town, striking fair the historic belfry of the Hôtel de Ville—a shot eloquent alike of the skill of the gunner and the purpose of the enemy.

In the course of the first day's bombardment and during October 7 and 8, when the firing ceased, more than one thousand shells were thrown into the city. The city, broken and reeling from this wanton attack, still showed to the Germans, above her smoke and dust, remnants of her former glory; so in the middle of November the bombardment was resumed and continued about ten days. On the twenty-third of November sixty-nine shells struck the belfry, the last causing its final collapse, at which the bombardment ceased for the day. After the total destruction of the belfry and Hôtel de Ville, the guns were directed on the Cathedral and the Archiepiscopal Palace of St. Vaast with a like result.

Victor Hugo in two sentences described the ante bellum town: *"Il y a deux places curieuses á pignons en volutes, dans le style flamand-espagnol du temp de Louis XIII. Sur l'une des places la plus petite, il y a un charmant hôtel de ville du XVe siècle, accosté par un delicieux logis de la Renaissance."*

Beside the two squares, with their Spanish-Flemish voluted gables, there was the Rue de Géry, which was lined



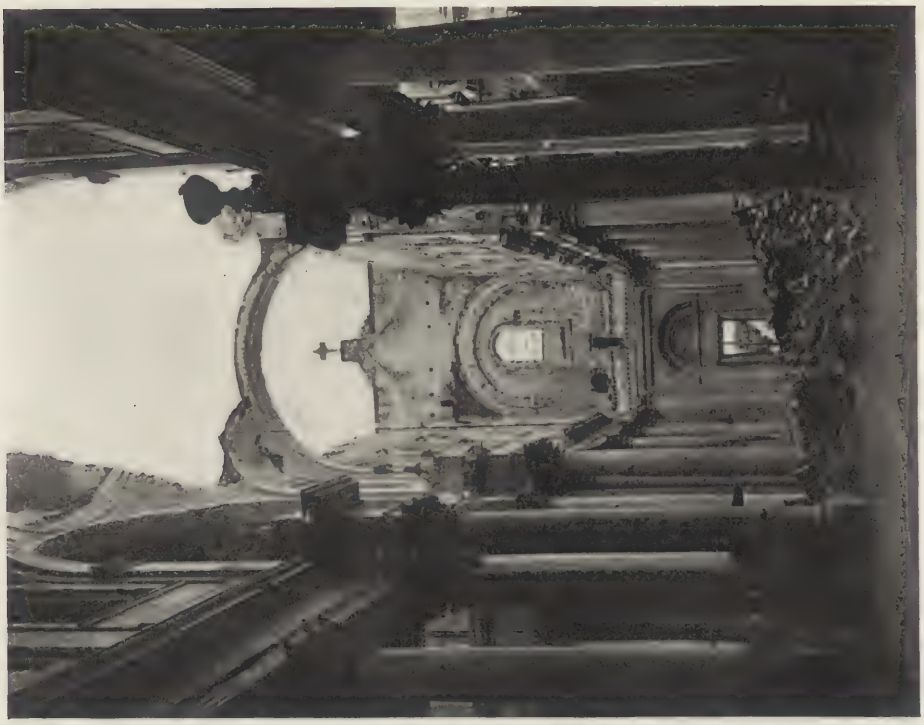
HÔTEL DE VILLE, ARRAS. FROM THE LITTLE SQUARE (LA PETITE PLACE), SHOWING THE TOTAL DESTRUCTION OF THE XVI CENTURY LEFT WING.



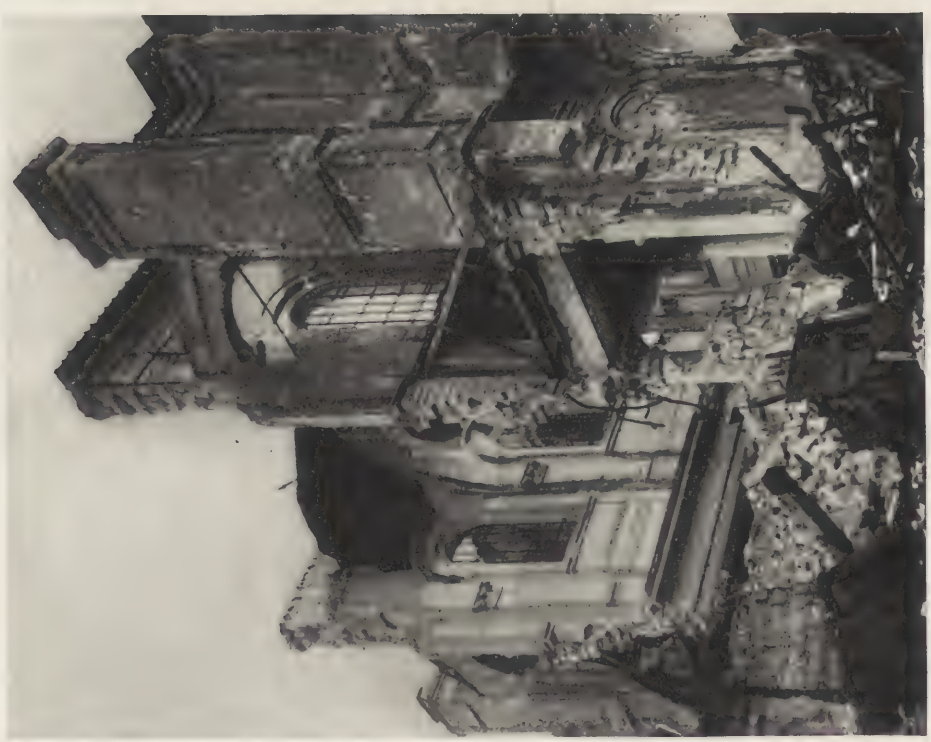
HÔTEL DE VILLE, ARRAS. THE LEFT WING.



HÔTEL DE VILLE, ARRAS—FAÇADE ON THE GREAT SQUARE.



CATHEDRAL OF ARRAS—NAVE, LOOKING TOWARD ENTRANCE.



CATHEDRAL OF ARRAS—EXTERIOR, TOWARD SOUTH TRANSEPT.



CHURCH OF ST. JOHN THE BAPTIST, ARRAS.



CHURCH OF ST. JOHN THE BAPTIST, ARRAS.



THE GREAT SQUARE (LA GRANDE PLACE), ARRAS, EARLY IN THE BOMBARDMENT.



THE GREAT SQUARE, ARRAS, AFTER THE BOMBARDMENT.



TOWER OF THE URSULINES, ARRAS.



RUE ST. GERY, ARRAS.



PALAIS ST. VAAST, ARRAS.

with similar houses, and in addition to the Hôtel de Ville, with its exquisite tower, 240 feet in height, with its three great clocks, and "La Joyeuse," the great bell, there once was the cathedral, a classic structure, built 1755-1833. Connected with the cathedral was a collection of buildings including the palace of the Archbishop, the Seminary, and Civic Museum, the cloisters of which contained busts of local celebrities, and its galleries paintings of the Flemish school.

The tower of the Ursulines was a modern structure built in imitation of an ancient tower on the Petite Place; the Church of St. Jean Baptiste, a Gothic edifice of the sixteenth century.

The complete and savage destruction of these fair buildings and of most of the town is made evident enough by photographs without the evidence of witnesses, which is voluminous. Shrouded in her ruins, veiled in her smoke and dust, like her sisters of Ypres, Louvain and Rheims, Arras mourns the loss of her children—her children of stone and timber and glass—who had stood the storms of the centuries, while the children of men, far below, paused in their little careers to marvel ere they passed on.*

And those of us who believe that the wanton destruction of art and architecture is akin to murder and a crime against civilization are sternly reminded by the German publicists that our protests are "the twittering of birds," and that the military chieftains must not be annoyed.

*"Ma cathédrale est devenue inhabitable. Notre mairie est détruite, le beffroi est déchiqueté. Deux cents maisons ont eté brulées, calcinées—C'est navrant. Je reste au poste au milieu de toutes ces ruines!—Depuis 15 jours, la cannonade ne cesse pas, les fusillades non plus; pendant trois jours nous avons subi un bombardement terrifiant. Rien n'a manqué. Les habitants n'ont plus d'autre fortune que ce qu'ils portent sur le corps. La rue Saint-Géry n'est plus. Je reçois des visiteurs qui n'ont plus rien à eux, mais tous sont soumis cependant à la volonté de Dieu!"
—(Lettre de l'Evêque d'Arras, 7 octobre.)

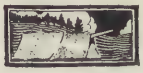


SCULPTURE CLOISTER IN MUSEUM, ARRAS.



1.—SCENIC SCREENING OF A VILLAGE SQUARE.

NOTES ON CAMOUFLAGE



By J. André Smith



I AM writing this on the shore of Lake Champlain. Beyond the dense screen of trees that lines the steep railroad embankment in back of me are the long, train-like wooden barracks of the Plattsburg Training Camp.* Where I sit the low-sprung trees arch over me and through the lacing branches the sun throws shadow shapes of leaves over the olive drab of my uniform. A few feet from me, pebbled and grass-grown, the beach lies in a glare of white sunshine, and along this bright strip three men are walking toward me. They are moving at single file about six feet apart. Now they are in front of me, not more than eight feet away. I am in plain sight and yet they do not see me. In the cool green light of the sunflecked foliage, with the shadows of leaves dappling my uniform, I have become invisible. And now they have passed beyond me. Had these three men been my enemies and had I been armed, just one shot——.

The war has done one thing of inestimable value: it has struck us wide-awake. We are on our toes fighting death, not according to the old rules of warfare and self-preservation, but by every possible and impossible means that science and genius can devise. There is a super-hellishness about modern warfare that is almost beyond our wildest imaginings, and the act of defense and offense has called forth every means, every device and every art to serve as a shield and weapon against its frightfulness. The most practical mechanism and the most fanciful dreams go hand in hand, and no one dares to judge of the other's superior power, since the former may supersede the latter and the practical weapon of today may yield tomorrow to a dreamer's ingenuity.

And the one thing that is truly responsible for this tremendous alertness is the aeroplane—the all-seeing eye! Instead of making war impossible, as was at one time seriously predicted, it has made only one kind of war impossible, and that is the old-fashioned kind, the kind our forefathers used to wage. The aeroplane has put the third dimension into reconnaissance, and the enemy's eye, instead of being restricted to width and breadth of observation, now travels in vertical lanes, flashing the sky with incredible swiftness of sight. And it is the aeroplane that has given to modern warfare a new weapon of defense and protection—camouflage.

Camouflage is the art of concealment; it is an old art reborn into prominence through extreme necessity. The screening of trench furrows with leaves and sod which was practiced in former wars is as true an expression of the art as is practiced to-day, where miles of roadways are sheltered by avenues of made-to-order trees and hedges and painted scenery. It differs only in the degree of the increased powers of the enemy's observation, which the aeroplane, driven by keen-eyed observers and equipped with all-seeing cameras, has raised in equal proportion to the vastness and scientific ingenuity of the modern war game. Camouflage is not an incidental function to modern warfare; it is a vital equipment. It is the garment of invisibility that is capable of not only protecting the individual soldier and the furniture of war, but of screening the movements of an entire army. It is an art that is still in its crude stages of development and one that is capable of almost unlimited possibilities. The French, with characteristic alertness, were quick to appreciate its great usefulness and employ and continue to use it with rare skill; the Germans lost no time in their endeavor to outdo the French, and the English accepted it as a modern necessity, but practiced it at first with a heavy hand and with a lack of grace and imagination. As H. G. Wells humorously puts

*Since this article was written Mr. Smith has been appointed a First Lieutenant in the Engineering Corps of the U. S. Army, with prospects of being assigned to the newly created Camouflage Division. He is an architect, of the firm of Smith & Ross, New York.—Ed.

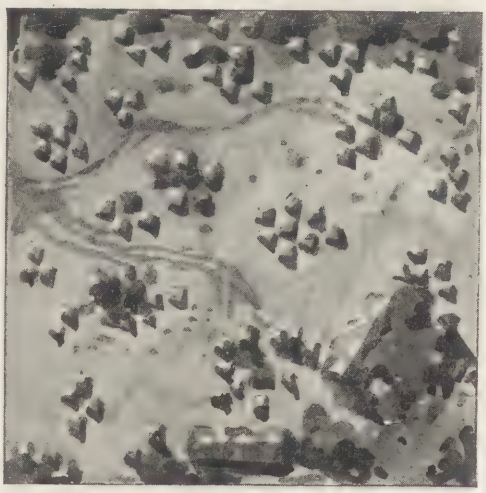
it in his book, *Italy, France and Britain at War,* ". . . many of the British tents look as though they had been daubed over by protesting man muttering 'foolery' as he did it. With a telescope the chief points of interest in the present British front in France would be visible from Mars. . . . But the effect of going from behind the French front to behind the English is like going from a brooding wood of green and blue into an open blaze of white canvas and khaki."

This statement by so keen an observer as Mr. Wells is valuable in that it points out forcibly that camouflage is not merely a matter of daubing paint, but that it calls for the right sort of daubing and the right sort of color and, above all, demands skillful consideration and direction. In other words, it is an art and not the thoughtless application of a theory.

Through various newspaper accounts and magazine articles the public has become familiar with many of the more sensational accomplishments of the French camoufleurs, and in this article it is not my intention to repeat these, but instead to touch upon camouflage from the military point of view, and also to speak of its technical side.

In battle, as in any other position of danger, self-protection is instinctive. Soldiers need not be taught to seek cover at the sound of the first whizzing bullet, but on the contrary the whole structure of military discipline is founded for the control of men in the face of danger so as to avert, if necessary, the demoralization through the impulsive desire for self-protection. All the long months of intensive training throughout which discipline is exacted in the most minute details there is but one underlying object, and that is to develop the absolute control of the men; to gird them against fear. The untrained soldier in going "over the top" would do one of two things: he would either run forward or turn and run backward, and for that reason he is held in the training camps until he has reached such a state of self-control and discipline that when the signal is given he will go over at a walk and advance in the face of hell-fire in an unbroken line. But to those of us who have never tasted danger it is hard to conceive of men reaching a state of self-control that will allow them to face almost certain death with outward courage. To make the display of bravery all the more glorious we must consider too that the men have stood for hours (usually in the bleak, dispiriting dawn)





Seen from an aeroplane the checker-board regularity of the tents makes it impossible to conceal an encampment where the present system of exact alignment of tents is employed. Like the trees of an orchard they become conspicuous because of exact spacing. With a method of random grouping, especially in a location where there is a scattering of trees, much could be accomplished toward securing low-visibility. With the tents properly camouflaged and the occasional use of leaf-net screening a camp could be rendered almost invisible.



The value of the mottled painting of camouflage is evident in this illustration. Viewed from a distance the tents on the right of the picture are far less conspicuous than those on the left. The irregular markings confuse the eye and make the outlines of the tents harder to distinguish.

waiting and waiting for the signal to advance. It is needless to say that this period of anticipation exerts on the men a terrific nervous strain. And it is right here where the pressure of dread can be somewhat relieved by the assurance of safety or at least partial protection. The dugout, with its heavy roof beams and twenty feet of earth, offers to some degree such a haven; but if it were possible to make our open trenches safer it would result in a decided improvement of morale on the part of men who must unfailingly hold their courage against the time of attack. It is reasonable to believe that even the most perfect training and discipline cannot entirely relieve the fear of hurt and death, and for that reason whatever can be done to add courage, even to the most courageous, would be an added and invaluable asset to military control. The protected soldier, the man who feels reasonably guarded against needless exposure to the enemy's fire, is a better and more serviceable man than one who is constantly face to face with the fear of death; and it is therefore of vital importance that every measure, no matter how slight, that can be employed to increase the soldiers' comfort, is just so much gained in the morale of troops as a fighting force. It is in this particular that camouflage has a distinct military value. It serves three admirable purposes: (1) Concealment from the enemy; (2) the resulting protection of the men; (3) increased efficiency of the men through the feeling of greater safety and the partial relief of mental anxiety.

In the matter of concealment, camouflage makes no claim of originality or discovery. As I have said before, concealment is the obvious means of self-protection and is instinctive. In view of this fact it must have been indeed through a very curious circumstance of pride that the soldier of the olden days scorned protection as, no doubt, being unsoldierly, and carried away by the pomp and glory of the military game, or perhaps counting far too much upon its fear inspiring impressiveness, attired himself in uniforms of blatant conspicuousness. Here in America the Indian, painted in body and face or dressed in the earth-tones of leather, taught the Red Coats a bitter lesson in low-visibility. Invisibility is today the cry in uniforms as well as in fighting; the khaki of our army and of the British, the silver-green mist of the German and the smoky horizon blue of the French are all efforts toward the attainment of invisibility; and in fighting, the sheltered trenches, dugouts, the sunken batteries and the miles of sappers' tunnels speak for this same desire for concealment and obscurity. And in view of this fact it is only natural that camouflage should have grown into an important military necessity and developed from the simple methods of leaf-screening to the present practice of the art whereby every piece of the furniture of war is painted for low-visibility; screens are erected to shelter miles

of roadway and, as a further development of the science, deception is resorted to in order to blind the enemy by means of distraction.

In these days of censored news it will be impossible to write with absolute certainty about matters dealing with the war, and for this reason the true history of the art of camouflage will have to wait its historian until universal peace restores to us the freedom of speech. And so, in tracing the development of this new art, I must confess that I am resorting to borrowed evidence; and although I have not seen with my own eyes, I have at least the confidence and trust in those eyes that have seen this work, and until he can convince me otherwise I shall have to ask the reader to share this trust with me.

It became quite evident as soon as the enemy aeroplanes began to penetrate far in back of the French lines that some form of concealment on a much larger scale than would be possible by the old method of leaf covering would be necessary. During the first weeks of the war and well into September the countryside was still wearing its summer foliage of bright green; and although tree branches and also trees would answer the purpose of screens, the leaves soon dried in the summer heat and, turning brown, declared their secret purpose to the shrewd eye of the enemy. In the open fields hay offered a ready means of concealment, and it is a fact that many an innocent haystack shot death from its heart.

But these natural means of protection, although useful in an emergency and under conditions where leaves and tree branches and even hay were procurable, were not suitable on the extensive scale of concealment that the new warfare made imperative. To cover the long lines of supply trains and the vast canvas coverings of the ammunition dumps and the even greater area of tentage of an encamped battalion would demand a forest of green, and even if this were available, the thing would be absurdly impracticable. So it became a matter of paint, and not paint alone but the proper application of it. From the very first it became evident that merely a "battle-gray," or in fact any one-color painting, would not answer the purpose of a substitute for foliage; it lacked what the foliage quite naturally accomplished: the breaking up of the surfaces concealed and the confusion and deception of the eye of the observer. So in order to make paint yield the highest effectiveness it was decided to apply it with a certain realistic imitation of leaf forms, and during the earlier experimental stages of the art of camouflage it was not unusual to see enormous guns and their tractors and ammunition wagons painted to represent banks of foliage and rocks. These when placed on the edge of a wood or in the particular location for which they had been especially painted were remarkably effective. They melted into the landscape and quite effaced themselves from the eye of the enemy. But when the time came to advance these same guns into new positions it was not always possible to find for them the necessary sympathetic background, and more often than not the greens and yellows of the suggested leaves proved to be more conspicuous against the dull earth color than if they had been painted in some single tone of gray. It was also impracticable constantly to attend these guns with a squad of painters whose sole business it was to alter the color scheme to fit its ever-changing surroundings. And besides another element entered to defeat the most carefully painted war machine, and that was the fact that a gun when painted in leaf forms, although made reasonably invisible at a certain distance, lost its effectiveness when viewed at a greater distance; the short brush strokes that nearby were so suggestive of leaves in dappled sunshine became a mere flecking of paint spots, and the further off one viewed the work the more completely blended became these spots and the more sharply did the form of the gun itself assert itself. In other words, it became evident that the application of paint, no matter how cleverly done, in imitation of leaves and smaller natural objects, while it served to render it more harmonious to its surroundings and gave it some degree of invisibility, nevertheless failed to destroy



An example of camouflage painting (leopard spots) and overhead screening. The dappled marking on the gun aims merely to distort its form and create in the mind of the observer a doubt as to its military value. In this picture the huge tell-tale wheels with their caterpillar treads have been draped with a mottled cloth. The overhead screening is made of leaf-netting and tattered canvas, holes have been cut and the light showing through them repeats the mottling on the gun and adds to the effect of the confusion.



The shell-ruptured earth of the modern battlefield forms the pattern motif which the camoufleur must use in the painting of his war furniture. The tank pictured here has been camouflaged with "perspective markings," the lower part suggesting the crumpled earth and the upper portions gradually blending with the long lines of the horizon. The color would correspond, running from warm earth tones to the gray-blues of distance.

the form of the gun itself. Here then was the problem: how to apply the paint to overcome this difficulty.

The French, with their natural alertness to the uses of science, saw in the protective coloration of birds and animals a solution to this perplexing question. They began at once to experiment along this line, bearing in mind that the coloration of animals seems to have been done by a kind Providence for the purpose of breaking or disguising the outlines of the animal and to counteract as far as possible their under shadows. With this in mind the camoufleurs darkened the high lights along the top of a gun barrel and lightened its under surfaces, using for their paint colors that were agreeable to the existing surroundings. And then with this as a foundation they began "breaking" the outlines with irregular streakings and blotches, all very weird to behold at close range; but at a distance, if they did not accomplish invisibility, they gained what they were unable to do before, and that is the confusion to the eye. A gun painted in this way became a "What-is-it?" It raised a doubt in the mind of the observer; it disarmed his suspicions and accordingly blinded him to its importance. In other words, this new method of painting accomplished invisibility by giving to objects a sort of harmless insignificance. Painted in this way, aerosheds, tents and the various gigantic instruments of war are modest, shrinking deceptions. They seem to say "Tut, tut, don't look at *me;* I am nothing!"

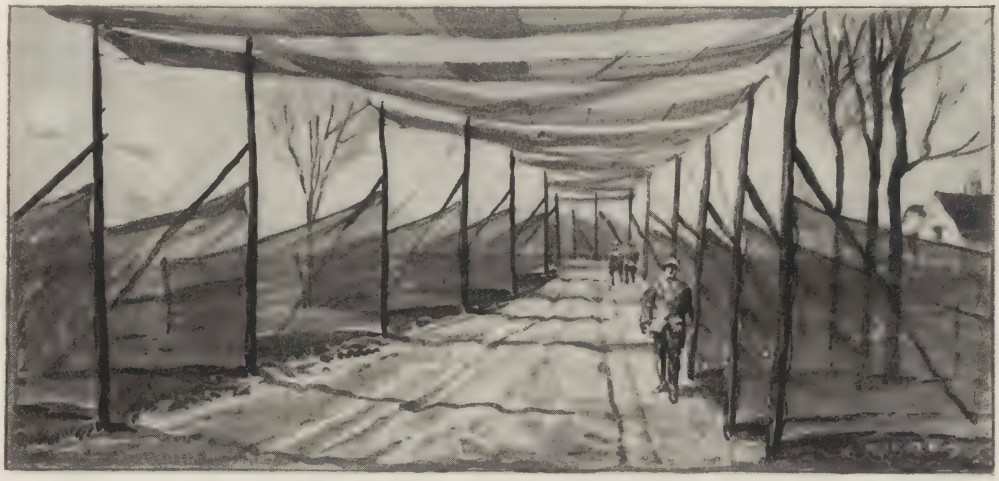
But to accomplish this degree of distraction is not any easy matter; the camoufleur finds the problem of "breaking outlines" the most difficult of his art, for the reason that he must contend with the painting of surfaces which in most cases are composed of angular planes, projections and overhanging edges with their underlying shadows. In the case of animals, and especially with birds, this is almost entirely eliminated, since the furred and feathered surfaces here are softly modeled and the light falls upon them with the most gradual gradations of tone from the upper to the lower and under surfaces. In addition to this, an animal or bird can always "lie low," and by crouching close to the ground can "squash away" the telltale shadows of the deeper under surfaces. Furthermore, the protective markings in animals are usually more perfect in the smaller animals, and especially the helpless young, and in these cases the markings are small in scale—that is, they correspond in size to the crinkled forms of dried leaves, lichen and fragments of tree-bark and the like.

In contrast to this the camoufleur's task is almost in proportion to the comparative increase in the size of the objects that he must conceal. His protective markings must be in scale with tree trunks and boulders or the scarred upheaval of the shell-torn earth. He must constantly struggle against obliterating mechanical surfaces, sharp angles, cogs and wheels, and, worst of all, he must fight against the suppression of the infinite shadows cast by projections, to break the sharp mechanical edges and wipe out, if possible, the shadow cast by the entire object. Paint alone cannot always accomplish this obliteration of form, especially in the larger guns; but it is nevertheless constantly employed as a basis for protection, and further augmented by the use of reed or leaf nettings supported on posts above the guns and often in front and on both sides.

And the next step from this humility of paint was the introduction of a counter attraction. Following the "Tut, tut, don't look at me," came the logical, "Oh, say, look at this," the "this" being, of course, something very carefully and apparently carelessly exposed with the object of attracting attention away from the "don't look at me." And it is in this particular, and the ingenious development of this idea, that camouflage can claim originality. And it is also through this side of the work that camouflage gained its popular recognition; the game of "fooling the Boche" appealed to the people and amused them tremendously, and although or perhaps because the work was fraught with danger it must have brought considerable satisfaction and amusement to the camoufleurs themselves. A joke is a joke the world over,



Overhead screening on a hill road. When viewed from the enemy's position below the hill and at a distance the overlapping strips of cloth hide the road entirely.



Exposed roadways are screened either by a continuous wall of canvas or by the method of wing-screening illustrated here. Above the road, strung from pole to pole, is a network of cloth as a safeguard against aerial observation.

even if it is lighthearted or grim as death; and while it has raised camouflage to the prominence and popularity of a slang word, it has also robbed the art of its dignity and seriousness. We are too ready to associate the work of the camoufleurs with their mirth-provoking accomplishments, the fakes and tricks and amusing deceptions, and to overlook their thoroughly important work of concealment.

At Chalons and several other places are factories devoted entirely to the manufacture of camouflage properties and materials. Here is prepared the reed and grass matting, yards of it, miles of it, that is used for the screening of roadways. These road screens, sometimes of leaves on wire netting or more often of burlap or some lighter material, are strung on poles along the sides of the roads, forming a continuous shelter from the observation of the enemy. Along some roads, and especially those that are unusually dusty, these screens have been arranged in a series of wings extending outward from the edge of the road perpendicularly for a distance of ten to fifteen feet. When viewed from the position of the enemy, the wings overlap each other and give the appearance of a continuous screen. The reason for this method of construction is to allow the dust to blow freely to the side of the road rather than let it rise above it in a clearly distinguished column, as it would do if it were held between continuous walls of screening.

This same method of road screening is also employed on hills that are open to the enemy's observation. In this case the ruse of overlapping wings is used above the road and over it, like the sky-drops on a stage set. Looked at from a distance the rise in the roadway is completely covered. Work of this nature is not so much a matter of ingenuity as straightforward engineering; but it is nevertheless hard and dangerous work. Roads that require screens are obviously roads that are open to the searching eyes of the enemy, and that means that they are exposed to shell fire and all the terrors and destruction that modern war machines are capable of inflicting. The camoufleurs, as part of the engineering corps, are with "the army ahead of the army"; they must either prepare the road screens in advance of a movement of troops or undertake the work under the partial protection of night. At the best it is a hazardous job and very often exacts the highest penalty, and that without the soldier's satisfaction of conflict with a visible enemy.

As a protection against aerial observation strips of green are stretched over the roadways diagonally from pole to pole, forming a sort of criss-cross network. When viewed from a great height this green lattice is sufficient to counteract from the bright glare of the road and to a great extent conceal whatever movement of troops that may be going on beneath it.

It must be remembered that the enemy does not rely entirely upon visual observations; in fact most of the location maps, trench lines and the like are made from photographs taken through a telescopic lens. For this reason the camoufleur must count to a certain extent on the effect of color on a photographic plate. Blues, for example, photograph very light; in fact all the cool colors appear a good deal lighter in a photograph than do the warm colors. Accordingly the matter of the proper use of color, or, rather, the use of proper colors, becomes a very important factor in the painting of protective markings and outline distortions. A piece of work that might pass very successfully a visual examination might prove utterly inadequate when seen in a photograph. It would seem, therefore, that it be advisable to use whenever possible a monochrome of some warm color, such as brown-green, varying the tones with the introduction of white and black and depending more upon color suggestion than the actual use of color.

Just what the American camoufleur will bring to this new art is still too early to predict; he will approach it at first in true humility, asking of his French brother the benefit of his experience, inspecting carefully the work that has been done on the English as well as the French fronts, and after that—who knows? The

art is still in an early stage of development. If the French were ingenious enough to invent it and the Germans to copy it, it is safe to say that we Americans shall first of all *systematize* it; we shall make a business of it—not a cut-and-dried business, but one directed with level reasoning and touched by American humor and inventiveness. To the French artist and architect we have always looked for instruction and inspiration; it will be easy for us to follow their lead in camouflage as we have in painting and architecture, and, united by a common cause, we shall delight in playing the game with them against the Boche, and we shall do it in much the same spirit—happily, seriously and brilliantly.



The vast area of roof and wall surfaces that must be camouflaged involves a tremendous amount of labor. Since much of this work could be standardized the use of a paper with a camouflage pattern lithographed upon it and applied to the walls with a thick paste would offer many advantages over the use of paint.



FIRST NATIONAL BANK, MENASHA,
WIS. CHILDS & SMITH ARCHITECTS.





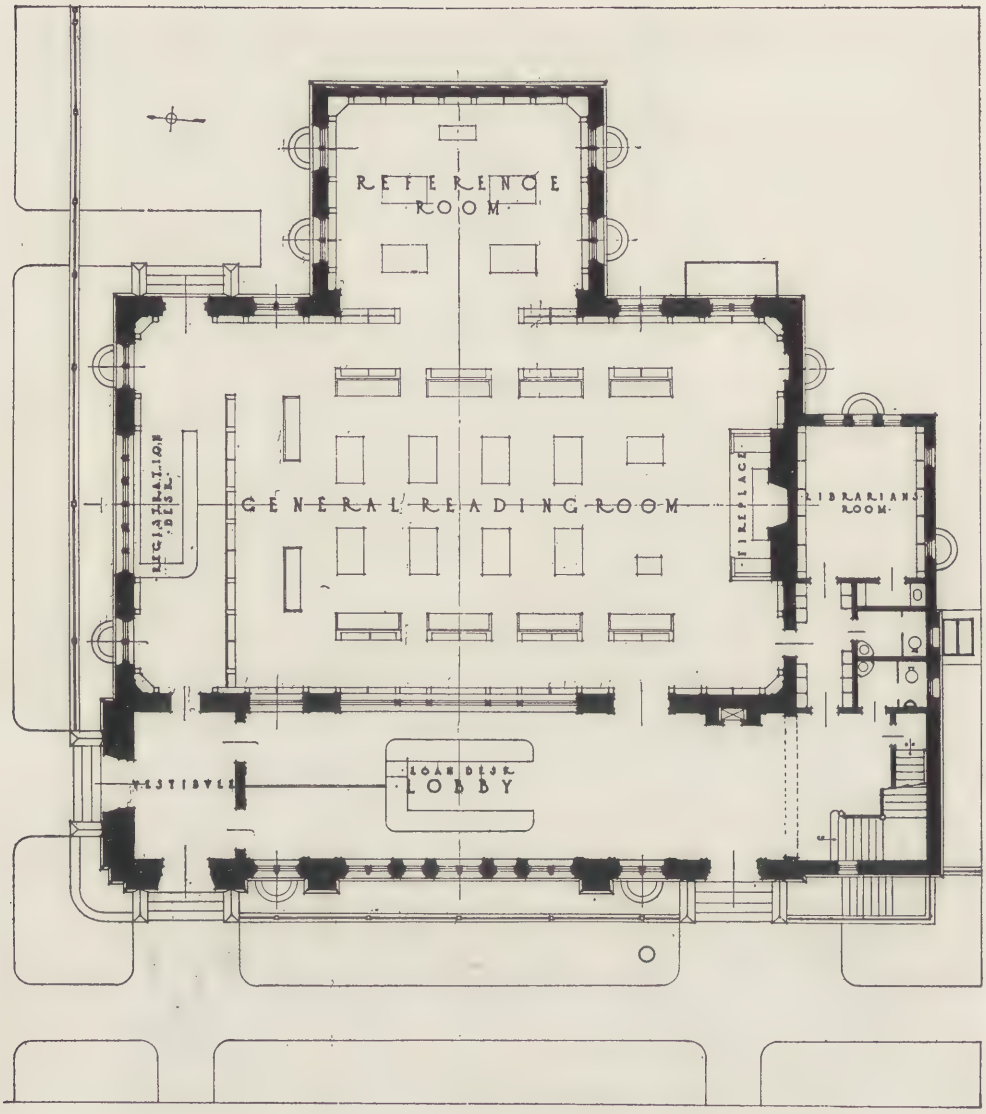
BANKING ROOM, LOOKING TOWARDS ENTRANCE—FIRST NATIONAL BANK, MENASHA, WIS. CHILDS & SMITH, ARCHITECTS.



BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN PUBLIC LIBRARY. WILLIAM B. TUBBY, ARCHITECT.



BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN PUBLIC LIBRARY. WILLIAM B. TUBBY, ARCHITECT.



BROWNSVILLE CHILDREN'S BRANCH,
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READING ROOM—BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN PUBLIC LIBRARY.
William B. Tubby, Architect.



BAY IN READING ROOM—BROWNSVILLE CHILDREN'S BRANCH, BROOKLYN PUBLIC LIBRARY.
William B. Tubby, Architect.



BUILDING OF THE PUGET SOUND NEWS CO., SEATTLE, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



BUILDING OF TUCKER HANFORD CO., LITHOGRAPHERS, SEATTLE, WASH. CHARLES H. BEBB AND CARL F. GOULD, ASSOCIATE ARCHITECTS.



BOOKS ON COLONIAL ARCHITECTURE

By RICHARD F. BACH

Curator, School of Architecture, Columbia University

Part VIII.—The Final Record

IN the course of a series of studies on the literature of Colonial architecture which it was our good fortune to publish in the pages of the Architectural Record during a number of months, we have made a humble effort to gather together and comment upon as many as possible of the representative works dealing with the fascinating field of the formative years of American building art. For reasons given at the outset and emphasized from time to time we have sought to provide a complete index of published works—books, brochures, articles in periodicals, even efforts in germane parallel or allied territory—in this very fertile field for architectural study, and in so doing, we have been enabled to demonstrate some of the crying needs in this architecturally important province—many of whose constituent areas are as yet unexplored, some possibly even undiscovered. It may be questioned whether there can be any crying needs beyond those of warfare at the moment of writing, but it is our sentiment that the maximum propagation of the arts of peace even in the midst of war can but redound to the added credit of the ultimate victory.

Above all, it is to be urged and reiterated that American treasures of Colonial architecture require—and that very soon—a final and definitive record. The monuments are fast disintegrating, or, worse yet, are being restored out of all semblance to their pristine quality and homeliness. Remodeling old New England farmhouses has become a rich man's pastime; making aberrations of the type of Shadow Lawn out of dignified manor houses on the Rappahannock is an attractive outlet for the increment of a favorable stock market. There are now in the South splendid manors occupied by ill-starred descendants of old-time planters, too proud to relinquish the homestead in exchange for money and too poor to grant the buildings the requisite care and repairs to preserve them for posterity. There are, even in New England, farmhouses lying in ruin, though their history reaches back to a noble age in American growth. These buildings all demand an adequate record, not only of their existence, but of the

details of their construction and design and decoration. By approximating some understanding of the mode of attack of the Colonial architect, or rather "carpentect," we shall likewise approximate an understanding of the impulses that actuated him and made good his results. And be it remembered that, though in general sometimes of but mediocre achievement, most of the early buildings were favored with the personal attention of the builder; the actual turn of the hand of the carver may be seen, and this again is a reason why we should require some record of these interesting realities of a bygone art.

It may be said and, in a sense, justly, the Colonial has been written into the ground; there is nothing new, and why duplicate? Nothing is further from the truth. Colonial architecture has never been completely recorded. Some few buildings or some few aspects of many buildings have been photographed and drawn and reproduced *ad nauseam,* especially certain types from Salem and Boston. But even with this alleged superfluous repetition, every reproduction in a periodical of a Salem doorway meets with interest, though the reader may well know the source at first sight; nor does the architect ever deny a similar interest, feeling that the qualities of a good Colonial motif share with all other excellent works of art the quintessence of character, by virtue of which design is enabled to transcend the moment and live for centuries other than that of its creator. And there is the further insinuation that any feeling of being overfed on Colonial detail may be due either to poor reproduction or to poor understanding on the part of the spectator. And here we have one of the leading difficulties, a problem of constant recurrence which will trouble us as long as there are magazines satisfied with repetition and inferior illustrations, and as long as there are architects too strongly controlled by the professional inertia which obliges the practitioner to find his motives exclusively in a limited office library. A magazine will be content to commission several draftsmen to travel abroad to ransack unfrequented corners of Italy and France for unrecorded evidences of Renaissance civilization, of a type surely written and rewritten, edited and re-edited, as often and as poorly and as insipidly, as Colonial architecture could not be in a dozen decades of prolific periodicals; yet this same magazine will be loath to expend half the cost of such an expedition in sending draftsmen to make a final record of even the most prominent buildings on Maryland's Colonial eastern shore.

And, on the other hand, how can the reader of such periodicals avoid the nausea due to frequent repetition of the same old Colonial doorways and McIntyre carvings, unless his intelligence is trained to appreciate the multifarious shades of significance and form and beauty that are everywhere reflected in Colonial building and furniture and decoration, as controlled by locality, climate, and type of early foundation? Again we say that a complete record is needed and needed at once. Such a record will be adequate, it will be excellent, it will be final. If, then, any more books and articles in the magazines see the light after such a record has been completed, they must be most abstrusely detailed in character and deal chiefly with things other than those purely architectural or artistic, or else they must for obvious reasons be duplications of the desired final record published under the best available auspices and therefore themselves as nearly as possible infallible.

What is true of the magazine articles is true of the books. Most laudable efforts have been made by several publishers to bring out works of more than casual interest by enlisting the efforts of recognized authorities and by fathering only such collections of essays, photographs or, best of all, measured drawings, as would achieve an actual and welcome contribution to the knowledge of the subject. If the great final record is undertaken, as we shall propose it in the following paragraphs, such collections and texts will become part of the record, either in the first instance by previous agreement or else in the form of reprints. But above all, the proposed final record will be a type and an example of inclusiveness and quality, both as to text and as to drawings and other

reproductions, and therefore all other publications worthy of a second glance will automatically follow its leadership and the future of American architectural history will be blessed with an assurance such as has not been vouchsafed to that of any other country, notwithstanding even the paternal interest of the splendid ministries of fine arts of France and Italy.

But by dint of what agencies, natural or supernatural, is such a final record to be obtained? Whence secure the means, which at first bid fair to be fabulous, to set so vast a project on foot with any guarantee of completion, let alone of ultimate success?

II

The solution, be it said, is to be found in good will and whole-hearted cooperation, rather than in an outright appropriation of money probably to be misguidedly expended. There are in this country a number of recognized authorities on Colonial architecture and art generally. There are also a number of writers, not perhaps authorities, but sufficiently acquainted with the Colonial manner to be able to render good and intelligent service in gathering or collating Colonial material. There are also a number of schools of architecture regularly requiring as part of the prescribed work of their students a certain quantity of carefully prepared measured drawings. There are in addition a number of architectural and allied periodicals that regularly or frequently publish matter of interest in the Colonial field. There are numbers of architects either directly interested because of the particular character of their practice or maintaining a collateral interest as a matter of principle, so that here again there should be no lack of cooperation. What is more, there are many architects residing in regions still redolent with the Colonial atmosphere, and these surely cannot deny a distinct Colonial interest. And, finally, there is the well established organization of architects in municipal centres, by states, and even nationally.

There are, then, a goodly number of channels through which interest in things Colonial already flows, in greater or less intensity, and the problem therefore is chiefly one of organization, or possibly of consolidation. The extant remains of American formative architecture are very few; of the existing buildings by no means all are worthy of detailed record, except as to the fact of their existence and the names of their owners, but the remainder surely deserves a definite reproduction in book and plate form. It would be a matter of no great effort, with the system of cooperation indicated below, to catalogue all worth while Colonial buildings still in existence and to keep such a catalogue in an accessible place for the use of architects, writers and others interested.

The American Institute of Architects is the logical organization to father such a program of cataloguing all existing Colonial buildings, since a project of such value could be granted its proper dignity nowhere as well as under the aegis of so well recognized and well established and well regarded an institution.

But the preparation of such a catalogue would be but the forerunner of the much weightier task of gathering of drawings, literature and other data on the Colonial field. In the first place, it would be necessary to collect all published works on Colonial architecture, so that a complete collection, fully representative of the work already done in the direction of recording our formative building period, might be established and made available for reference and comparative study. This collection of works, which would require but very limited shelf room, should be given into the care of a body or institution enjoying a thoroughly recognized architectural influence in this country. We can think of no better location for a representative collection of works on Colonial architecture than the Avery Architectural Library at Columbia University (of whose staff the writer has the honor to be a member), long representative of American architectural traditions and progress, which might be regarded as a library of deposit, the works issued to date forming a nucleus around which, with the aid of any further publications—and there are bound to be an always increasing number—

would logically be gathered the first complete library of works on Colonial art.

The task of preparing the catalogue above mentioned might involve a small expense, for clerical labor and for stationery, but for the work of supervision and collation as based on knowledge we are convinced that there would be no dearth of willing assistants, each qualified in his own district of the original Colonial territory. And in the gathering of the books and other data no serious obstacle should be met. In the first place there have already been brought together at the library above cited a goodly number of the books thus far published. Of those not already there many could be obtained on request if so great a purpose were made known, many would be sent in without request and others could be purchased at a small cost. In some cases, as for instance that of one of Asher Benjamin's books, the gap could probably never be filled, since extant copies are too few.

But in both these preliminary undertakings a similar mode of operation could be followed, so as to eliminate the largest number of waste motions. We can imagine, for instance, a central committee on Colonial architecture, a regular committee of the American Institute of Architects, very carefully chosen and with permanent membership. This central committee might be composed of men residing in the chief centres of the original thirteen states. The members, beside meeting as they might find it advisable and rendering an annual report to be published, would also individually be chairmen of similar committees in their respective chapters. By this means the whole interest is subdivided and localized in sufficient degree. The chapter committees would be the ultimate agencies through which the data necessary for the catalogue of existing buildings and also any other material for a representative library on Colonial architecture would finally be obtained. The whole undertaking should, thus far, not be unwieldy, chiefly for the reason that we have followed our quarry to its source. Time would be required and it would not be a work of a day, but it would be worth any expense of time when finally completed.

We have, then, the beginning of the final record of which we have so emphatically proclaimed the need. The Colonial library would at once make known any serious gaps, so that the interest of searchers and writers would at once seek new fields for exploitation. To find these fields they would automatically be referred to the Institute's catalogue of existing buildings.

Out of this would then grow a great new interest, interpretation and understanding, of the building era that started us on our national course so well, only to be replaced by imitations and emulations of ideals that were dead or otherwise not of our creation. This great new interest would turn the periodicals in the right direction and the repetition of the same old doorways and mantels would cease of its own accord. It would guide the writers of books and articles, the makers of measured drawings, the historians and all others interested into new channels of fertile fascination. The general exploitation of a noble past would, when thus accurately understood and made known under the finest auspices, lead to such an understanding of the firstlings of our architecture as no amount of desultory writing and preaching and promiscuous drawing could ever accomplish. Out of such an understanding a revived Colonial style in its thousand phases would soon come into being, and the thread of our architectural growth, broken under the spell of the dread classic revivals, could again be given its requisite continuity, at least in domestic architecture.

III

After the catalogue and the library would come the final record itself. It would be a labor of persuasion and good will and cooperation, for in this day and age we cannot picture the donation of a large amount of money for the purpose of drawing up Colonial buildings. A gift of such Utopian savor would at once remove all our difficulties, but it is not to be expected in the midst of the world war. It would therefore devolve upon the same central and chapter com-

mittees above suggested to act as the chief agencies in guiding writers and publishers in the proper directions, so that their results would be adequate and illuminating and new and final. The committee would arrange for some general scheme for the publication of works on Colonial architecture, with due regard for sizes of sheets, character of drawings, details to be observed, best manner of indication and reproduction, kind of paper to be used for plates, best form of binding, lettering, etc., in fact embracing all essential features of an excellently made and thoroughly useful and final record of the building a book undertook to reproduce. With this as an ideal, this committee could easily impress upon publishers and writers and magazines the advisability of approximating as nearly as possible such an ideal of representative publication. We are assured that, for obvious reasons, all members of these three categories would be prompt to respond, for all three are looking for help and for light. What is more, the efforts of the schools of architecture could also be enlisted and the measurement and drawing of living Colonial forms substituted for that of lifeless plaster casts of foreign art in museums.

Of course, if the Utopian appropriation—a consummation devoutly to be wished for only—could be realized, the Institute itself might be made an agency of execution to bring into being a thoroughgoing set of volumes on representative buildings still in existence. And even with no greater spur than that of general interest, we can imagine at some future time a small appropriation from the Institute or some other organized body or institution, to start such a publishing project on its way. It is, of course, too much to expect from the august Congressmen who fathered the execrable power house project in Washington. To be sure, we cannot expect publishing firms, in accord with our suggestion in the preceding paragraph, to dispense with their own ambitions as to the format and quality of their books, nor that authors in turn will not demand some degree of individuality, however much beside the point for the purposes of record. Still even an approximation to an ideal set by the Institute would be a great advance. And working along similar lines, it would not be a serious matter to persuade publishers of new editions of the more modern works on Colonial architecture to cast them into this ideal format, although any bona fide reprints of old-time "Companions" and "Treasuries" would have to preserve their original features.

IV

By these three steps, then, (1) of making a catalogue of existing Colonial buildings, (2) of making a collection of books and other data on Colonial architecture published to date and placing this in some centrally located library of deposit, and finally (3) of drawing up an ideal form of publication for instructive books on Colonial architecture, inspiring and persuading the publication of always more books patterned after this ideal and urging approximation to this ideal on the part of all writers, publishers and other *cognoscenti*,—by these three steps will the final record of Colonial architecture ultimately come into being.

But where such a record shall begin and where end we cannot say. At best its earliest and latest dates will be simply arbitrary fixtures. At any rate, there would be no difficulty in finding the earliest extant building, but this in turn might not be deemed worth the labor of detailed drawings and text description. But this is a minor matter and one for our suggested committee to determine. Yet there are other unexplored regions contiguous to that of Colonial architecture: what of Colonial furniture, painting, textiles, sculpture, and a dozen and one other lines of endeavor, not to mention the closely allied matter of biographies of architects and craftsmen and disquisitions on Colonial office practice and methods. Could other academies and institutes be persuaded to undertake a similar labor of record and reproduction? So enormous an undertaking it is beyond us even to suggest.

And what sort of a final record should we find of best avail? Shall it be a rec-

ord for architects alone, or shall the laborious task of instructing the architecturally untutored laymen up to the level of the inscrutable plan and section be undertaken, and the financial welfare of the whole project thus endangered? It should not be difficult to strike a middle course. By means of excellent photographs and correct perspectives the layman's interest can always be held; by accurate plans and sections and measured drawings of details of carving and other ornament the architect's interest can always be held. How much of each there shall be is again a matter for our suggested committee to determine. Regardless of the angle from which it may be regarded, such a final record, attainable only by dint of untold sympathy and cooperation, is bound to win recognition and prove its worth.

But it will sponsor some other advantages. We need only to mention the positive improvement in magazine plates and text that is bound to follow; or again, the improved character of books of photographs and measured drawing—excellent though many of these already are—when it is generally known that the Institute favors or recommends thus and such method as of best value to architects. And finally, it is not difficult to prophesy the good augury of such interest on the part of the Institute when the layman himself is considered.

Presently an increasing number of historical and patriotic societies, like the Sons of the Revolution, would undertake the preservation of historic buildings—as has been done with the Philipse Manor House and with Fraunce's Tavern—and out of this might grow a movement to make national or state or municipal reservations of certain buildings and their adjacent territory—as was done through private generosity in the case of the Dyckman House in New York and through public will in Independence Hall—so that, like the nations of Europe, we also should be blessed with "national monuments" preserved and perpetuated out of the public funds, because they breathe of a worthy past.

Yet one other point occurs to us. Could not the good execution of such a final record by chapters on the Atlantic Coast inspire in turn similar projects in behalf of Spanish Colonial architecture in the great Southwest, or corresponding studies of the work of lower Mississippi Valley, or like examinations of the French Colonial remains in the region of Quebec? These, to be sure, would not be of virile interest—excepting of course the first named—for present practice, but by such means would be provided the possibility at least of bringing into existence some few chapters of the history of architecture in North America, and particularly in the United States.



Venetian Monuments in War Garb.

In accordance with Italy's customary solicitude in all matters regarding the fine arts, most detailed precautions on the part of the Italian national ministry and similar commissions in a number of cities have been taken toward protecting historic edifices and their precious contents against destruction by military and naval forces, but most of all against aerial attack. The region of Italy most directly affected, considering the geographic location of the nations now in conflict, would be that of Venice and the surrounding territory of the province of Venetia.

The proximity of Venice to the Austrian naval bases at Trieste or even Pola, a matter of from 80 to 100 miles, and the particular nature of the terrain immediately surrounding the city, with its waterways, lagoons, marshes, not to mention its actual small size and crowded buildings, all aid in rendering aerial attack a simple matter, as the frequency of Austrian bombing expeditions seems to show. What is more, the plentiful areas of water, with a clear moonlight playing upon them, serve as a frame for the city, and provide for the airman a sort of target. While old St. Mark's is the bull's-eye of such a target, a hit anywhere within the limits marked out by environing waters would be sure to score destruction in some work of antiquity, for practically all of Venice is old; we have only to consult records of building activity there in recent times to learn that several centuries have witnessed the removal of but a very small number of old structures to make way for new, while the actual addition of modern buildings is of negligible quantity. If with these conditions in view, an enemy attack by means of hydroplanes were considered, it would be seen that the many bodies of water would provide ample space for landing of machines before or after attacks, while their small size and the noise and roughness of open water would furnish added concealment. As seen from above, and especially in the light of the moon, these same bodies of water served the airmen as a suitable frame for their objective. The defense of the city had, therefore, to rely not so much upon fortifications as upon mobile air forces as the surest safeguard at longer distance. But such defense depended upon previous notice of an approaching enemy, and, granted that such warning was too brief, the actual struggle between friend and foe would have to take place in the air above the city itself, with consequent aggravation of any damage the enemy could accomplish.

Venetians were obliged, as a result of these many unfavorable conditions, to resort to the last possible defense of all, namely, that of removing all portable art objects, in many cases to the south of Italy; in many others to cellars and sand pits near the city or within its confines. In the case of entire buildings, on the other hand, a most careful program of preservation and protection was worked out, involving such a packing with sand and burlap, and such a boarding up with planks and timber, as to disguise effectively nearly all of the most important buildings in Venice. But these precautions were the result, curiously enough, of a campaign—largely under the direction of Corrado Ricci, of the Italian ministry of fine arts, and of Gino Fogolari, supervisor of all galleries in Venice—for the citizens could not bring themselves to believe in the reality of an enemy attack; and it was not until a number of attacks on Ancona, Ravenna and finally a bomb within a few feet of the central door of St. Mark's, had proved this reality, that many Venetians were willing to set aside the original sentiment: If Venice must fall, let her fall in the midst of her beauty.

As a rule, sandbags and timber best served

this purpose, but in the case of certain special problems new methods had to be devised. Such methods were necessary especially in connection with St. Mark's, the Palace of the Doges, and numerous frescoes and other mural decorations not removable.

In the first place it should be borne in mind that it was not possible, because of local conditions of the soil, to build any inclusive structures of metal to shield any one building, as, for instance, the church of the Scalzi, which together with all other vaulted structures, not to mention their invaluable decorations, had to rely chiefly upon the precarious protection of lighter defenses, as will be shown. What is more, most of the vaulted structures were themselves too slight to bear the additional weight of any protecting construction above them; referring to the Scalzi again, we find Tiepolo's frescoes painted upon a very thin coat of plaster set against a slight wooden false work in vault form. For this reason the Austrian aviator was able to make such thorough work of the destruction of the great painting of the Translation of the Santa Casa to Loretto, in October, 1915, the bomb having penetrated to the void between roof and false vault, and, exploding there, scattered roof tiles to the winds and demolished the fresco to such an extent that all hope of assembling any of its parts had to be abandoned.

In the case of St. Mark's, arose the problems of protecting the domes, of removing all portable sculpture and other objects, and of building sand shields around practically the entire façade. The protection of the domes—that is, of the wooden and lead covered exterior domes—had been begun before the war by Luigi Marangoni, guardian of the structural fate of the old basilica—curiously enough still so called though not of basilican plan; this architect had caused to be poured over the entire superficies of all five domes a thin coating of cement mortar, thus giving each a sort of armor plate of sufficient elasticity to offset partially the effect of serious concussions or even of actual blows. The façade of the building, with its double tier of small columns and its myriad materials and colors, was enclosed in sand bags and wood boarding. Many detachable figures have been buried in sand, in some cases even in sand first baked at high temperature to destroy all possible source of decay. So great an addition to the weight of the entire building was made necessary by these many sacks of sand that the main piers of support had to be greatly strengthened in the crypt. To guard against incendiary bombs, a water system was installed serving all parts of the edifice from crypt to domes. Most interesting is the precaution taken in protecting the interior dome mosaics. Owing to the nature of the material, it was found that mosaic compositions subjected to great concussions of air fell outward, the resulting loss being usually greater than would have been caused by an actual penetration by a shell. The effect is very similar to that to be observed near the scene of explosions, where it is found that windows of neighboring buildings invariably crash outward, as a result of the sudden release from the equally sudden compression of air, the glass being insufficiently elastic to withstand the difference in pressure, which difference operates as a powerful suction. To guard against such destruction of mosaics it was found advisable to stretch curtains of strong linen before the walls, or in this case inside the domes bearing mosaic compositions. By this means a cushion of air was formed between the mosaic and the linen, with the result that this absorbed the force of a nearby explosion, thus saving the mosaic and the wall, and even in some cases saving windows.

The Palace of the Doges offered a particular problem, for the reason that any blow at its exterior columns at the level of the Piazza would have entailed the fall of the entire structure, or at least the effective disruption of the entire exterior design. All interior paintings by Veronese and others were fortunately on canvas and were rolled up on wooden cylinders for storage or transportation to safer regions. The building itself was made safe against marine or aerial destruction, that is against missiles sent directly or diagonally at the façades, by means of the construction of a new pier inside each arch of the main story arcade. But so that these additional piers might not exert any actual and as yet unnecessary supporting strength, in conflict with the columns and arches, they were made to terminate so as to leave an infinitesimal space beneath the arch in each case, and, finally, to prevent any new mortar from destroying existing patinas, this intervening space was filled with a piece of cloth covered or saturated with paraffine. Owing to the excessive weight of such an addition of material, a similar scheme could not be carried out in the second story loggia, and in this case a framework of wood was substituted. In the courtyard, again, the bronze well curbs, the Giants' Staircase, with its reliefs and

figures by Rizzo and Pietro Lombardo, received the usual mantle of sacks of sand.

In similar manner the fine Colleoni at Venice, the tombs of the Scaligers at Verona, the great Giovanni's Fountain of Neptune at Bologna and other free standing sculptural and architectural works have received each its war garment of sand and wood and metal, for in such cases it was found possible to erect steep pitched roofs of wood covered with steel as an additional protection.

The Italian has taken every precaution, but he is—in Venice at least—almost directly on the firing line. In America we look with awe upon the very need for such protection and with characteristic indifference wonder if the great conflict will ever be brought so close to our doors.

RICHARD F. BACH.

The Latin City.

There is no higher achievement in Latin civilization than the Latin idea of a city. In the ancient world the Romans invented the institution of the "Municipium" as one of the principal agents in spreading their empire of progress over the earth. Ever since, the mighty tradition which they founded has inspired a chain of brilliant successors in Italy to become centres of enlightment for mankind, each in turn down to the present day. Planners in twentieth century America might well take this ideal for their own if they wish their work to be a complete success; that is, if they want to avoid losing themselves in technical and mechanical details, if they desire to make their work purposeful and imaginative and inspired.

The Municipium, though characteristically Latin, like most Latin conceptions, had a Greek idea behind it. Athens had dazzled the ancient world of the Mediterranean in her role as a centre and source of power and ideas. She dispensed a civilization of art, letters, politics and manners to a barren world, giving out more than she received in return from the world. Then Rome took over the burden from Athens, with this difference that to the Greek simplicity and smaller scale was added Roman organization. The Romans developed the intricate mechanism of the city plan somewhat as we know it today. This makes their experience directly valuable to us. But in all their works—and herein their experience is more significant still—they held strongly to the grandeur of the Greek ideal, even magnifying it into conceptions of power and splendor characteristic of Latium. In the process, it is true, the Romans lost something of that limpid purity, the exquisite grace and vivacity and color, that extreme simplicity without surplus, which to us is the spirit of classic Greece. This difference is to be remarked in Roman sculpture as well as architecture, in most things Roman, indeed. The Roman work is more machine-like. It is as if Athens, unencumbered, could rise higher than Rome, who had to bear the burden of her mechanical organization. What Rome lost in humanism she chose to make up in power and magnificence, going even farther on the road than Hellenic Greece, from whose ideals she freely took over much to make her own. In fact, had she not had the civilizing example of Greece constantly before her, Rome might have become the Prussia of the ancient world.

Such distinctions between ancient Rome and ancient Greece may seem too far removed from our own twentieth century concerns, but they are valuable because their remarkably unified character seems to symbolize for us the important truths that underlie the civilizations of antiquity. For the great cities Rome offers instruction; and for the small, Athens, like Florence, shows that quantity may be a bar to quality. To use a more practical illustration, how often do we see today immense sums spent in projects where only a little clearer idea of these truths would have gained much finer results?

To pattern after the Greek ideal is an almost impossible task for moderns. They live in a more mechanical and a far more technical age than Rome. And how shall they attain the pinnacle gained by Athens or Florence? The Latin ideal is more practical. There has been only one Florence and one Athens in history, but a large number of flourishing municipia of Roman or Latin origin have existed, and modern minds can interest themselves in this field with more hope of success.

Then what is the Latin ideal? It is to be discerned in the cities of the Romans. The mechanical difficulties the Romans solved as we do. They built great avenues and streets and great sewers, and brought running water over huge aqueducts to the vast baths and into all districts of the cities. They made large bridges and markets. The difficulties of organization were solved as we, unfortunately, are only just learning to do. Much more clearly than we see, the Romans

saw the advantages of geometry in organizing their difficulties. Their large spaces and communicating streets, their open forums and courts and markets, and their basilicas for the dispatch of business and for the exchanges of trade, the sheltering colonnades of communication, the amphitheatres and stadia, the fountains, drill grounds, the arsenals—all were planned completely, spaciously and imaginatively to permit the varied life of the cities to function easily and fully. Geometrical arrangement and sense of form were the correct answer to their problems. It is true that now modern conditions are different, but the Latin system of reasoning was never more needed than it is today.

Always in the Latin mechanism the Greek ideal is the motive power. Where it is not so strong in art or letters it is apt to be reinforced with tremendous political or legal or economic impulses that knit it together in remarkable spirit and action. Inevitably there is an extraordinary development of enterprise among the citizens of civic patriotism. They feel the municipality to be a state, and all that it does takes on for them the dignity and majesty of a nation. This spirit is to be seen in its ceremonies and its functions. Architecturally it is expressed in splendid streets, gardens, parks, squares, colonnades, public structures, churches—all welded into a geometrical whole, symbolizing the might, the grandeur, the importance of the city. And the strong personality and imagination of the municipium prevents the geometry from making the result too mechanical or too monotonous. Altogether the purpose of a Latin city is to benefit the surrounding territory as well as to enrich itself—not to drive a one-sided bargain with the outside world in which the city is a parasite on the earth, disliked and feared by the country.

This civic ideal of Rome was handed down to medieval Venice, to the city-republics of Italy—Florence, Genoa, Renaissance Rome, and Venice again—all come to mind as symbols personifying the Latin idea. Such was their will and their imagination that they grew into states, and one of them—Venice—twice in her history became a world-power. In her economic, military, naval, and artistic splendor Venice rivaled Athens. From Italy the mantle descended to Paris, which today is the modern exponent of the Latin tradition, along with some of the cities of South America.

The Anglo-Saxon or Teutonic world has nothing to match against this Latin scheme of a community so organized, so harmonized and so well reasoned out, and so inspired and inspiring, an entity so clearly defined that it almost seems a person. With all their shrewd advertising and salesmanship the Germans have never made Berlin or any of their Prussian cities appear anything but homely and provincial. The mathematics of their architectural features are crudely copied from the French. In the Tier-Garden the Sieges-Allee of the Hohenzollerns is ridiculed even by the Germans—"the Puppen-Allee" they call it, "the street of the puppets"; while not far away the Kaiserdom—at once the St. Peter's and the Invalides of the German Emperors—houses an enormous tomb shaped like a gigantic gilded Rococo baby's cradle, gilded and painted and decorated and sculptured as one of Mr. Barnum's circus chariots and much larger, a sight that moves the traveler to tears—of laughter. Only Munich, in the south, where Latin influence and refinement penetrate, Munich alone partakes of the cheerful, well-formed character of the municipality. British cities, although they avoid the absurd, except like ourselves, when they set up statues to famous men, are, like our own, too often ugly and formless. They stretch over their sites more like overgrown towns or villages. Although it hardly becomes an American to criticise anything so mighty and important as London, the British capital seems to spread out into the country in a series of vast towns. Away from Piccadilly and Trafalgar Square it scarcely seems like a world-city. How different is the closely-knit unity of Paris, where each arrondissement has a remarkable character of its own, yet is truly Parisian. The Englishman prefers the country; he is more at home there than in urban surroundings. He even brings country-like features into the city. It is a frequent criticism of English architecture that it has mostly been a town and country architecture, that English city buildings are rarely monumental. The late Professor H. Langford Warren was accustomed to point out what he termed the "domestic scale" of British public buildings—how, with all the quantity of precedent of Rome and Italy, even so basic a feature as the orders were scarcely understood, were reduced to a domestic scale. They were never detailed with the splendid, forceful effect of Roman or Italian or French models.

It is apparent that the Latins alone grasp clearly the true idea of what a city should be; and this should be remembered

by those who are responsible for recent developments of city planning. The followers of the new school, who are mostly landscape architects, rebel at some of the extreme geometry of Latin planning. They dislike the formalism and monotony of the architectural symmetry, and would substitute informal and picturesque conceptions instead. In so doing they pursue the dangerous course of borrowing motives from old England and Germany, which are exactly the two sources where the ideal of the city has been only slightly understood architecturally. Consequently the new school sometimes forces on cities things that really belong in towns—or that belong in the country—not by way of contrast, but because they have a town-like conception of a city. Under English influence landscape architects often miss the true grandeur of civic expression. Their work sometimes lacks scale or else their public structures have private scale. Under German influence they tend to lose public scale by overdoing the picturesque. Some of them scorn symmetry and geometry, which are almost fundamental in a great community. As said elsewhere, the basis of this modern informal school of city planning is a sound one, for it rests on the unsymmetrical dramatic beauty of medieval cities. Its principles are to a degree Gothic. In practice today, however, the informal is emphasized at the expense of public scale, and the dramatic is neglected for the picturesque. A way to harmonize the conflicting theories might be the following:

Let the extremes of the Latin idea be understood and avoided, and let its occasional rigidity and machine-like form be softened with elements of the dramatic and the picturesque, especially in the residence parts of the city which are less public. It should be made clear that there are distinct architectural differences that mark a city from a town. The town may express more informal ideas than the city. New methods and fresher elements may well be employed if the ideal of the city is to remain a live one, but they can never alter the exalted ideal of the city as the Latins have imagined it. They alone have understood what an agent of civilization a city may be. The dramatic may justly be sought in a city, for the dramatic may personify the majesty of the municipality. But one should be sure that the achievement is surely dramatic and not merely informal or pictorial. It should be realized that the dramatic is one of the most difficult of all qualities to attain. It is, in fact, nothing less than supreme art. But the most important fact of all, the vital necessity, is to understand the fundamental idealism of the Latin Municipium. Compared to it all other elements, all technical and mechanical innovations, are details merely.

JOHN TAYLOR BOYD, JR.

December 1917

THE ARCHITECTVRAL RECORD



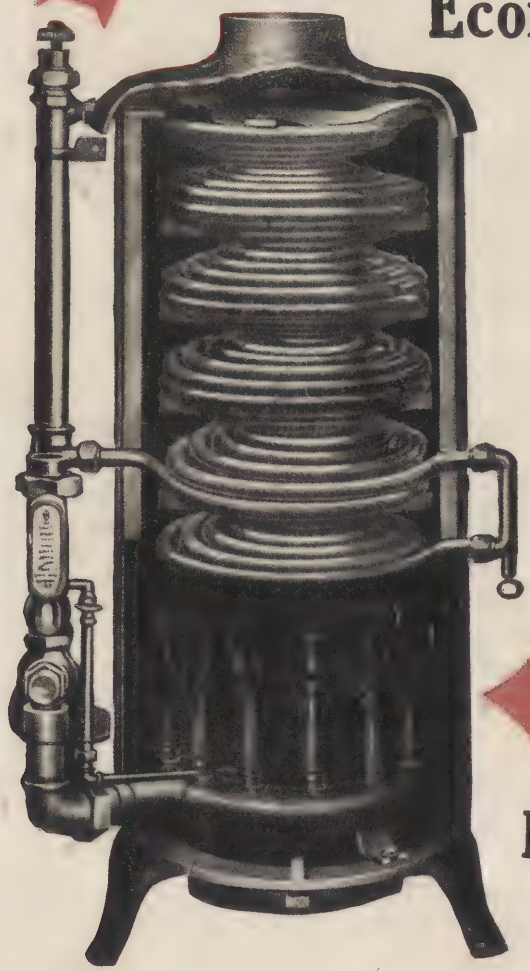
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FIG. 1. PORCH — RESIDENCE OF JAMES M. WILLCOX, ESQ., RADNOR, PA. HOWARD SHAW, ARCHITECT.

THE ARCHITECTVRAL RECORD

VOLVME XLII



NVMBER VI

DECEMBER, 1917



RECENT COVNTRY HOVSE WORK of HOWARD SHAW

BY

PETER B WIGHT



THE four country houses by Howard Shaw, which are here illustrated, form an interesting study, because, while differing greatly from one another, each having its own individuality, they exhibit in common certain features of plan and qualities of design characteristic of Mr. Shaw's work. Relying for artistic effect upon a balance of opposite parts rather than upon symmetry, Mr. Shaw is in a position to adapt his plan naturally to the circumstances of the site and of the household; and the rational procedure noted in the case of the plan is manifest again in the design, which is conceived as an expression of function, a premeditated expression formulated with the urbanity of art.

Mr. Shaw's work is further noteworthy for its sanity with respect to stylistic tradition. It is evident from the houses here illustrated that wherever historic art forms seemed appropriate for an American country place there was no hesitation about using them; on the other hand, there is frequent resort to invention, an invention tempered by cultivated taste and free from eccentricity.

The houses are those respectively of James M. Willcox, at Radnor, Pa. (Figs. 1 to 6), of George Pick, at Highland Park, Ill. (Figs. 7 to 14), of Clayton Mark, at Lake Forest, Ill. (Figs. 15 to 22) and of Edward L. Ryerson, also at Lake Forest, Ill. (Figs. 23 to 30).

It is interesting to note at the outset that the first of these houses, the Willcox residence at Radnor, Pa., has in its main entrance Roman Doric columns and pilasters, which carry an entablature surmounted by a simple cornice relieved with rather flat modillions on the under

side, which are not Doric. The cornice ceases to be classic, even in feeling, as soon as it departs from the entablature of the entrance composition and, running out on both sides, does not end until it has surrounded the entire building, forming a belt course. Then we discover that it is an architectural shelf intended to make the house appear low; it turns the second story and the slate roof into an attic, a contrivance which works in admirably with the loggias of the first and upper stories on the garden side.

We reach the house through a forecourt (Fig. 4), on one side of which is the approach for vehicles and on the other a footpath. Passing through the entrance loggia, we are in the "waist" of the house, marked "vaulted gallery" on the plan, which leads in every direction; and, by the way, a central gallery communicating with all parts of the building is a feature of many of Mr. Shaw's country houses. When you are in this one and the three south doors are open, you are practically out of doors. At the right are doors to the living room, the library and the stair hall; at the left, doors to the dining room, the reception room and the service department.

Nearly every room has windows on more than one side, the house being one hundred and sixty feet long from east to west and only thirty-two feet wide at the "waist." Beyond the court is a great terrace garden one hundred and forty-four feet long and sixty feet wide. From the southwest corner of the terrace was taken the view of the garden side of the house reproduced in Fig. 3. As will be seen from this view, the living porch and the dining porch are two stories high and furnish sleeping porches for the two principal bedrooms in the second story, all within the boundaries of the main wall of the house.

The building stands on the south slope of Camp Hill, occupied by an outpost of Washington's army when it was encamped at Valley Forge. It is reached by a long drive, which passes the service building (Fig. 5) at the foot of the hill, and, almost circling the hill, enters the high-walled forecourt on the north side. The gate in the forecourt wall opposite the drive entrance leads to the tennis courts and to a tea-house on the crest of the hill, where there is a wonderful view toward the west.

The exterior of the house is faced with gray wire cut brick, and Bedford stone trimming is used everywhere. The garden front, on the south, looks down through a broad glade cut through the woods which surround the house and its clearing on every side. The terrace, a few feet lower than the court level, is bounded by heavily buttressed retaining walls fifteen to eighteen feet high, which are surmounted by a stone balustrade. In the court is a large sunken pool, and on the terrace are two raised fountains.

The interior of the house is not shown in the present illustrations. The living room, marked "salon" on the plan, is wainscoted with French walnut and hung with Flemish tapestries, and has a painted ceiling. The dining room is also wainscoted, and the library, built with a vaulted ceiling, is finished in oak.

Our second example of Mr. Shaw's recent country house work is the residence of George Pick, at Highland Park, Illinois, on Lake Michigan. This suburb of Chicago is twenty-five miles north of the city. The southern part of Highland Park was originally an almost impenetrable forest, which has been allowed to remain except where sites have been cleared for country residences. The ground is high above the lake, and its eastern edge forms a bluff bordering the beach, which is of sand and adapted for summer bathing. The land is traversed by ravines that contain the natural water courses draining into the lake. The ideal site for a residence at Highland Park is a secluded clearing on a ravine.

Mr. Pick's house stands on the side of one of the most picturesque of the ravines. The view as one drives around the last bend of the private road in approaching it is very nearly that shown in Fig. 9. The ground slopes off to the left, the slope increasing until it becomes very steep, and the side of the ravine is traversed by footpaths with stepping stones down to the brook. The two-story living porch, seen at the left, is partly over the ravine, and its founda-



FIG. 2. ENTRANCE FRONT—RESIDENCE OF JAMES M. WILLCOX, ESQ., RADNOR, PA. HOWARD SHAW, ARCHITECT.



FIG. 3. GARDEN FRONT—RESIDENCE OF JAMES M. WILLCOX, ESQ., RADNOR, PA. HOWARD SHAW, ARCHITECT.



FIG. 4. FORECOURT—RESIDENCE OF JAMES M. WILLCOX, ESQ, RADNOR, PA. HOWARD SHAW, ARCHITECT.

tions are twenty feet below the first floor. It commands beautiful vistas through and across the ravine. There is no garden near the house, aside from the plantings immediately around it and on the terraces seen in Fig. 11, at the southwest side of the house.

The main entrance is through a loggia on the northeast side, where marble columns stand in front of brick piers to support statues not yet in place.

The walls, where not faced with wire cut brick, and where stucco finish is seen, are of hollow building tile. All the windows are arched with a single course of wire cut brick running through the wall. The living porch (Fig. 11) is built with brick piers in the first story and solid oak timbers, unpainted, in the second story.

Opposite the three arches of the loggia are corresponding arches giving into the entrance hall, two of which are filled with windows. Three polished black marble arches, each in three pieces, running through the wall, and three stone steps give into the garden room (Fig. 14), and three arches opposite to these lead out onto the garden terrace (Fig. 11). The garden room is also called the Chinese room, as it contains much Chinese furniture, and there is a suggestion of Chinese forms in the details of the architecture and decorations. The entrance hall and the garden room have marble floors.

Thus, it will be seen, one can look through the house from northeast to southwest in three places where the openings are "in range." There is another vista in the opposite direction through the dining room, garden room and living room out through the bay window of the latter toward the ravine. The living porch is wonderfully attractive in summer, and yet the building is equally adapted for winter as for summer use.

Like all of Mr. Shaw's work, this house is remarkable for simplicity in design, judgment in the choice of materials and sound workmanship. Every detail has been carefully designed and conscientiously executed.

Lake Forest is about five miles north of Highland Park. It has a similar situation on Lake Michigan, with a dense native forest, picturesque ravines, high bluff and sandy beach. It is more exclusive, and nearly all of the forest reserve is owned by a few wealthy families. The wooded part lies between Lake Michigan and the tracks of the Chicago and Northwestern Railroad and the Chicago and North Shore Electric Road. Immediately west of the railroads is the business section, which has lately been rebuilt from designs by Howard Shaw; west of the business section, and continuing for more than five miles, is a part of the town which was originally divided off into farms. These have been gradually acquired by wealthy persons who desire large areas for landscape improvement.

The eastern part of Lake Forest between the tracks and the lake was laid out as the seat of a university and a boys' school, both of which still exist. They occupy the original clearing in the woods. The whole woodland is traversed by curved roads which divide it into irregular plots of from twenty to forty acres.

Two of the new residences in the wooded section of Lake Forest are the work of Howard Shaw. One of these is the house of Clayton Mark, which looks out upon the lake from the garden side. Its plan is in Mr. Shaw's characteristic manner where a site has commanding views in opposite directions. It is long and narrow and most of the rooms have windows on two sides. While it has a length of one hundred and ninety feet from south to north, excluding open porches, it is only thirty-two feet wide at the "waist," including the entrance porch, or twenty-one feet through the enclosed part. There is a near approach to symmetry on the entrance front, but there are dimensional variations along the whole distance. The house faces one of the north and south roads of Lake Forest—that which is nearest the lake. On the other side is a very large terrace garden extending one hundred and twenty-four feet from south to north and as far east as the dining porch. The stone entrance porch and loggia are in Mr. Shaw's favorite Roman Doric style, and the whole design shows a more classic feeling than we are accustomed to see



FIG. 5. SERVICE BUILDINGS—RESIDENCE OF JAMES M. WILLCOX, ESQ., RADNOR, PA. HOWARD SHAW, ARCHITECT.

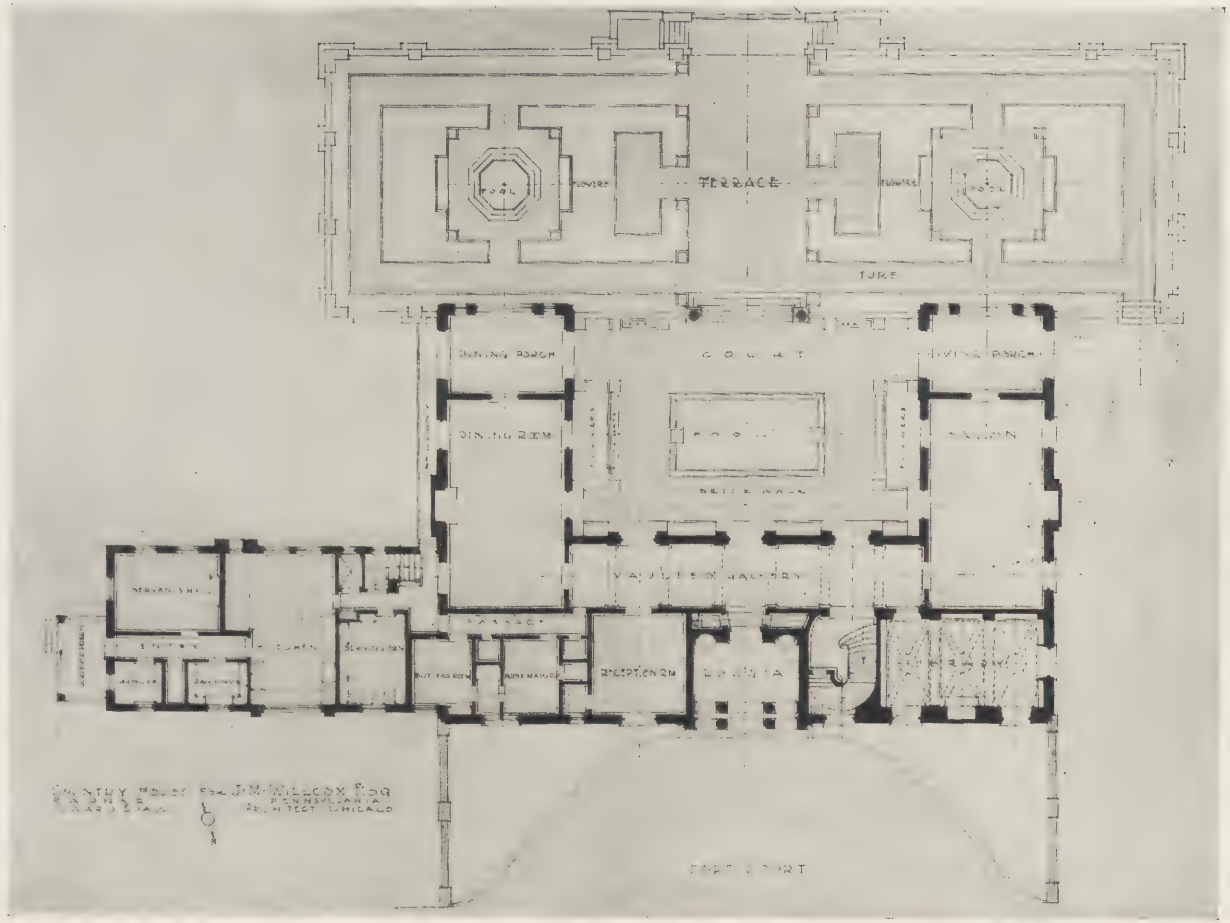


FIG. 6. GROUND FLOOR PLAN—RESIDENCE OF JAMES M. WILLCOX, ESQ., RADNOR, PA. HOWARD SHAW, ARCHITECT.

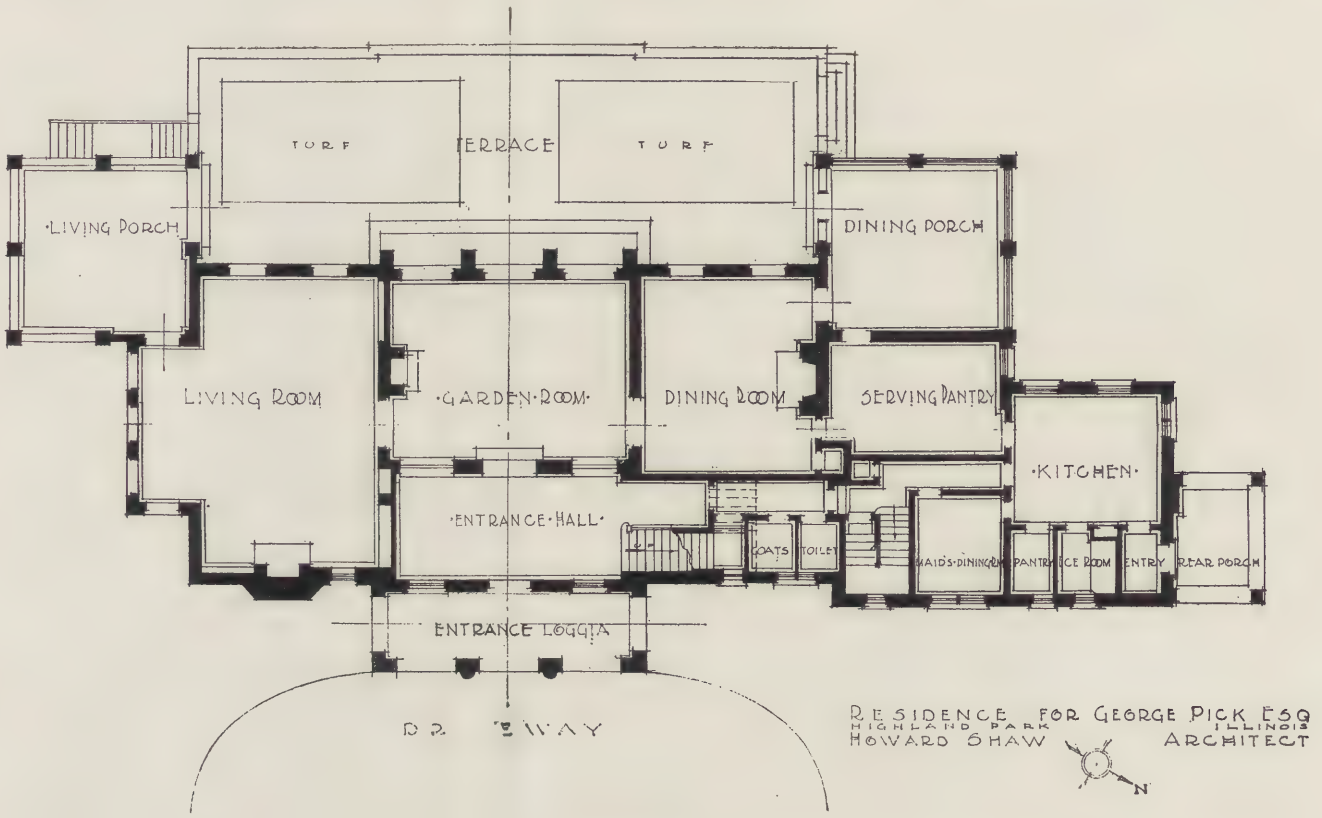


FIG 7. GROUND FLOOR PLAN—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL. HOWARD SHAW, ARCHITECT.



FIG. 8. ENTRANCE—RESIDENCE OF GEORGE PICK, ESQ.,
HIGHLAND PARK, ILL. HOWARD SHAW, ARCHITECT.



FIG. 9. ENTRANCE FRONT—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL. HOWARD SHAW, ARCHITECT.



FIG. 10. GARDEN FRONT—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL. HOWARD SHAW, ARCHITECT.



FIG. 11. TERRACE AND NEAR VIEW OF GARDEN FRONT—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL. HOWARD SHAW, ARCHITECT.



FIG. 12.—DINING PORCH—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL. HOWARD SHAW, ARCHITECT.



FIG. 13. LIBRARY AND LIVING ROOM—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL.
Howard Shaw, Architect.



FIG. 14. GARDEN ROOM—RESIDENCE OF GEORGE PICK, ESQ., HIGHLAND PARK, ILL.
Howard Shaw, Architect.



FIG. 15. ENTRANCE—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 16. ENTRANCE FRONT—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 17. GARDEN FRONT—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 18. TERRACE—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 19. GALLERY — RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 20. DINING ROOM—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL.
Howard Shaw, Architect.



FIG. 21. BILLIARD ROOM—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL.
Howard Shaw, Architect.

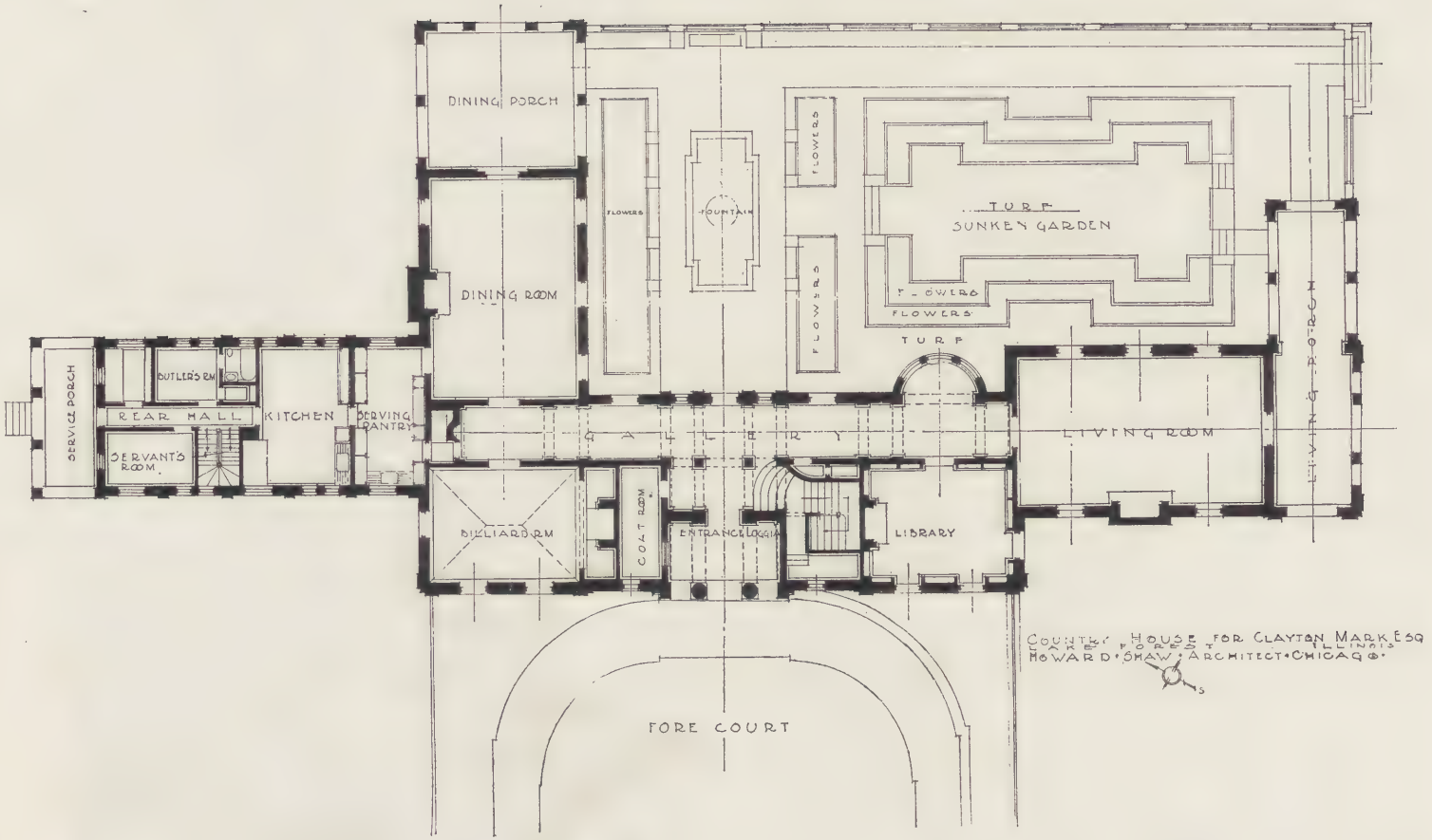


FIG. 22. GROUND FLOOR PLAN—RESIDENCE OF CLAYTON MARK, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.

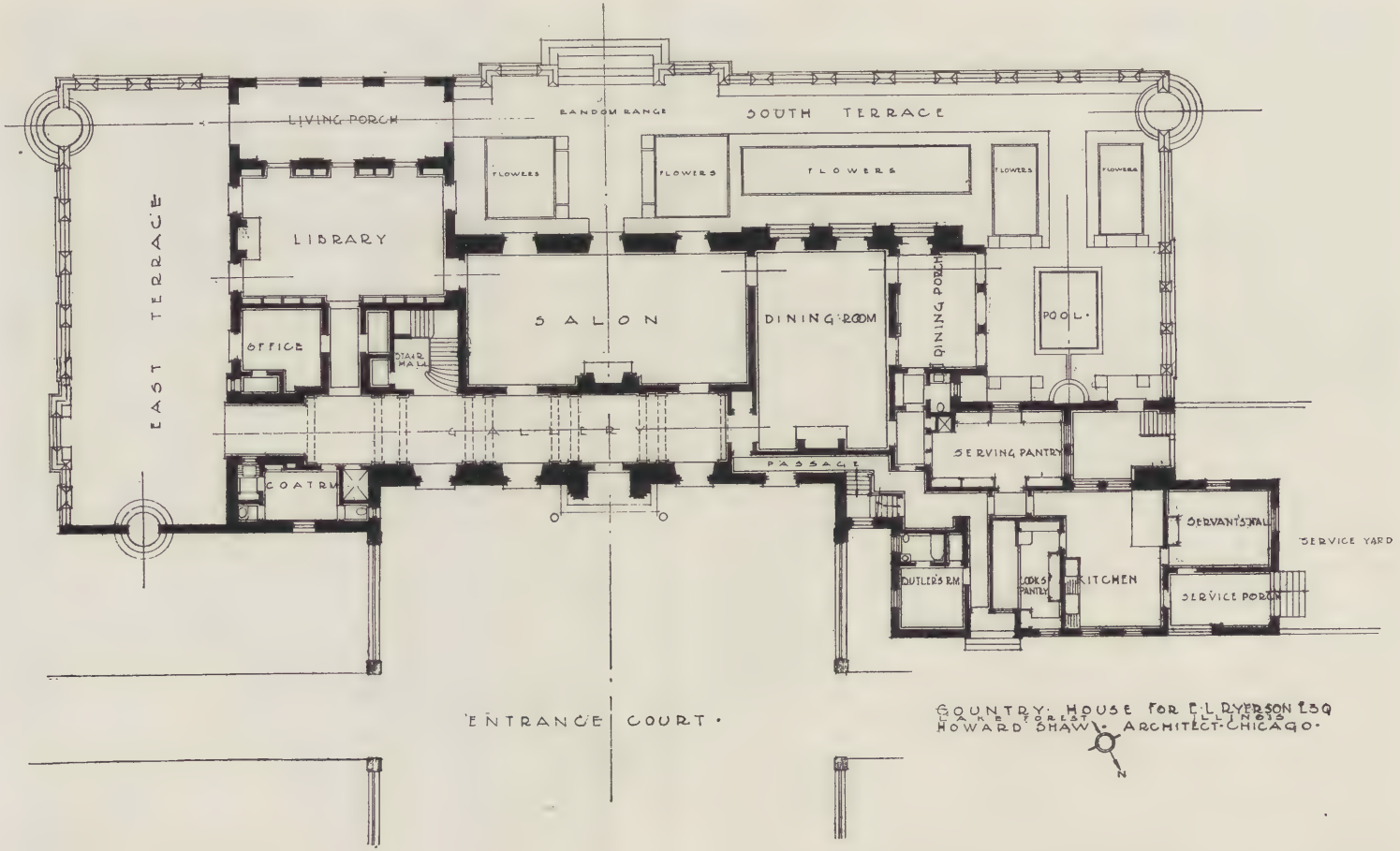


FIG. 23. GROUND FLOOR PLAN—RESIDENCE OF E. L. RYERSON, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 24. ENTRANCE FRONT—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 25. GARDEN FRONT—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 26. LOGGIA—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL. EDWARD SHAW, ARCHITECT.



FIG. 27. GALLERY—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL.
Howard Shaw, Architect.



FIG. 28. LIBRARY—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL.
Howard Shaw, Architect.



FIG. 29. GARDEN—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL. HOWARD SHAW, ARCHITECT.



FIG. 30. DINING ROOM—RESIDENCE OF EDWARD L. RYERSON, ESQ., LAKE FOREST, ILL.
Howard Shaw, Architect.

in his buildings. The small windows on each side of the entrance have beautiful bronze grilles. The Doric cornice, as in the Willcox house at Radnor, Pa., is continued around the whole building, giving a low effect to the design by treating the second story, in combination with the slate roof, as an attic.

The main feature of the interior is the fine "gallery" on the first story, eighty-eight feet long, which connects all of the principal rooms. At one end, opposite the library, is a semicircular bay window, which forms a charming nook, with the flower garden for a background.

The residence of Edward L. Ryerson, near the south end of the woodland section of Lake Forest, cannot be seen from any great distance, being approached only by a private road through the forest. The road enters the forecourt at the left or southeast side. The east terrace can be used as a private entrance to the house, through a doorway of the "gallery." The gallery is a feature of the house. It proceeds from the dining room, passes the main entrance from the forecourt, the two doors to the salon, the stairway hall and the library entrance, ending at the doorway from the east terrace. It is lined with sand-rubbed cut stone, the ceiling is vaulted and the floor is paved with marble in two harmonizing colors. All the rooms on this floor command views across the terraces and porches.

The garden is an exquisite piece of Italian landscape designed by Jens Jensen, and was contrived for the purpose of displaying four statues of the sixteenth century, which Mr. Shaw brought from Italy expressly for Mr. Ryerson.



MAIN ENTRANCE—BEVERLY FARMS
LIBRARY, BEVERLY FARMS, MASS.
LORING & LELAND, ARCHITECTS.

The BEVERLY FARMS LIBRARY
BEVERLY FARMS, MASS.

Loring & Leland, Architects

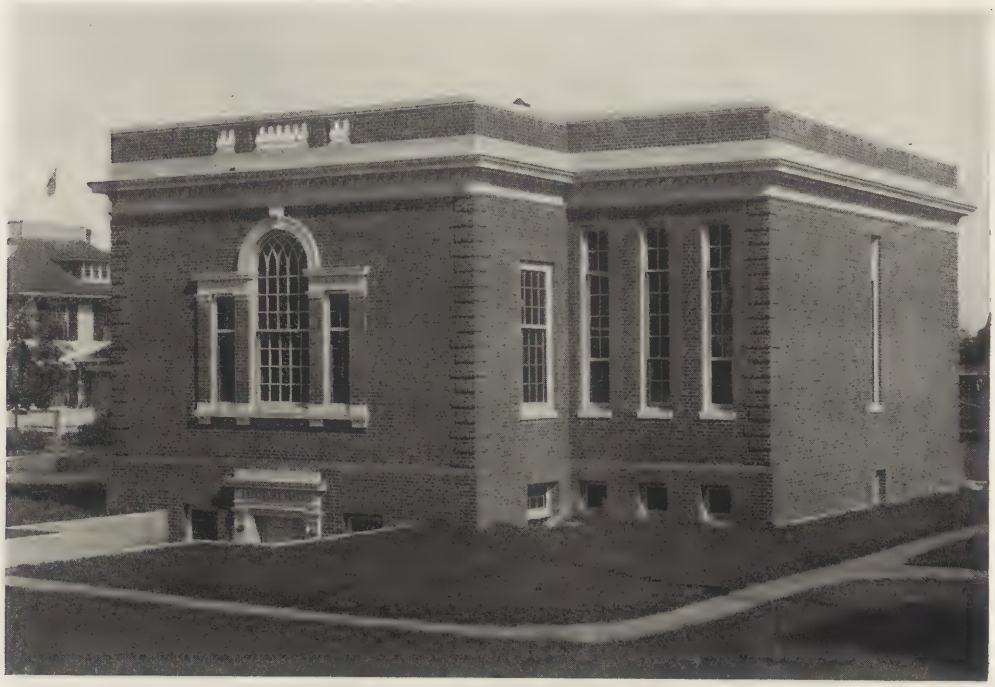
By MEYRIC R. ROGERS

THE small branch public library as an architectural entity is a comparatively novel development. Until recently it seemed to be the general custom among country communities to house their book collections either in some converted dwelling or in whatever unused rooms there happened to be in an extant public building. Brought about partly by overcrowding due to increase in number of volumes, but, perhaps to a greater degree, by an awakening civic or group consciousness, a noticeable change in this attitude has taken place. The small library has become efficient. The vitalizing and stimulating influence of the various state and national library associations has been felt strongly by these lesser and heretofore isolated libraries. They are kept up to date, both in management and contents, becoming ready and responsive media, if not actually sources of initiative, for the expression of whatever civic pride the smaller communities may feel.

In this light the branch library at Beverly Farms, Massachusetts, recently designed by Loring and Leland, may hold a really significant position. The particular conditions which had to be taken into consideration in the design of this building also hold in the case of many other communities of a similar nature; that is, while likely to see greater use during the summer months, it also had to be made convenient and comfortable for the whole year, at the same time economy in upkeep being a stern necessity. The successful solution of this problem hence forms a valuable professional precedent for future work of this nature.

The building is Georgian Colonial in style, consisting of two simple symmetrical wings linked by a central dominating feature. Behind these wings and forming in plan the stem of a squat "T" is an extension holding the working portion of the library. The wings form one open room, to which the projecting porch furnishes a weather vestibule. On the front façade this room is lit by four large square-headed windows of twenty-eight lights each, two windows to each wing. These features are, however, kept severely plain, the façade being dominated by the central motive. The end of each wing contains a well-designed Palladian window, which, although admirable in relation to the end elevations alone, does not tie in very closely with the fenestration of the façade. A very pleasing composition is obtained on one end by the introduction, in an area below grade, of the entrance of the basement lecture hall. In itself an excellent bit of detail, it is treated frankly and simply to express the function of that particular portion of the building, while the ship lanterns on either pilaster are appropriate to the locality if not to the architectural precedent. The fenestration of the rear is also effective in its direct expression of the internal requirements and the relief of large blank spaces.

In any consideration of the exterior, however, precedence must be given to the entrance motive. A broad flight of eight granite steps gives adequate footing to the doorway and its frame, and serves to emphasize the slender dignity of the order. The doorway itself has evidently received extreme care and consideration on the part of the designer. Not only are the proportions and detail of the woodwork really fine, but it has all been crowned by a fanlight with leading of an unusually handsome design. All



REAR VIEW—BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.
Loring & Leland, Architects.

this is framed by a frankly applied motive of coupled pilasters with their corresponding entablature growing out of the wall cornice. The frieze and architrave, it is interesting to note, are supplied by the name plaque, a decidedly ingenious device for giving the necessary reveal. Attention should be called to the design of the pilaster caps, the use of the shell and book expressing respectively the seaside locality and the function of the building. In order to give proper relief to these interesting modifications the bell of the cap has been tinted with a golden tone of lower value than the raised surfaces.

The trim has been executed in terra-cotta instead of the usual limestone, an economical device used throughout with apparently excellent results. The pieces are small enough to avoid distortion, and the danger of staining from impure atmosphere is of course negligible.

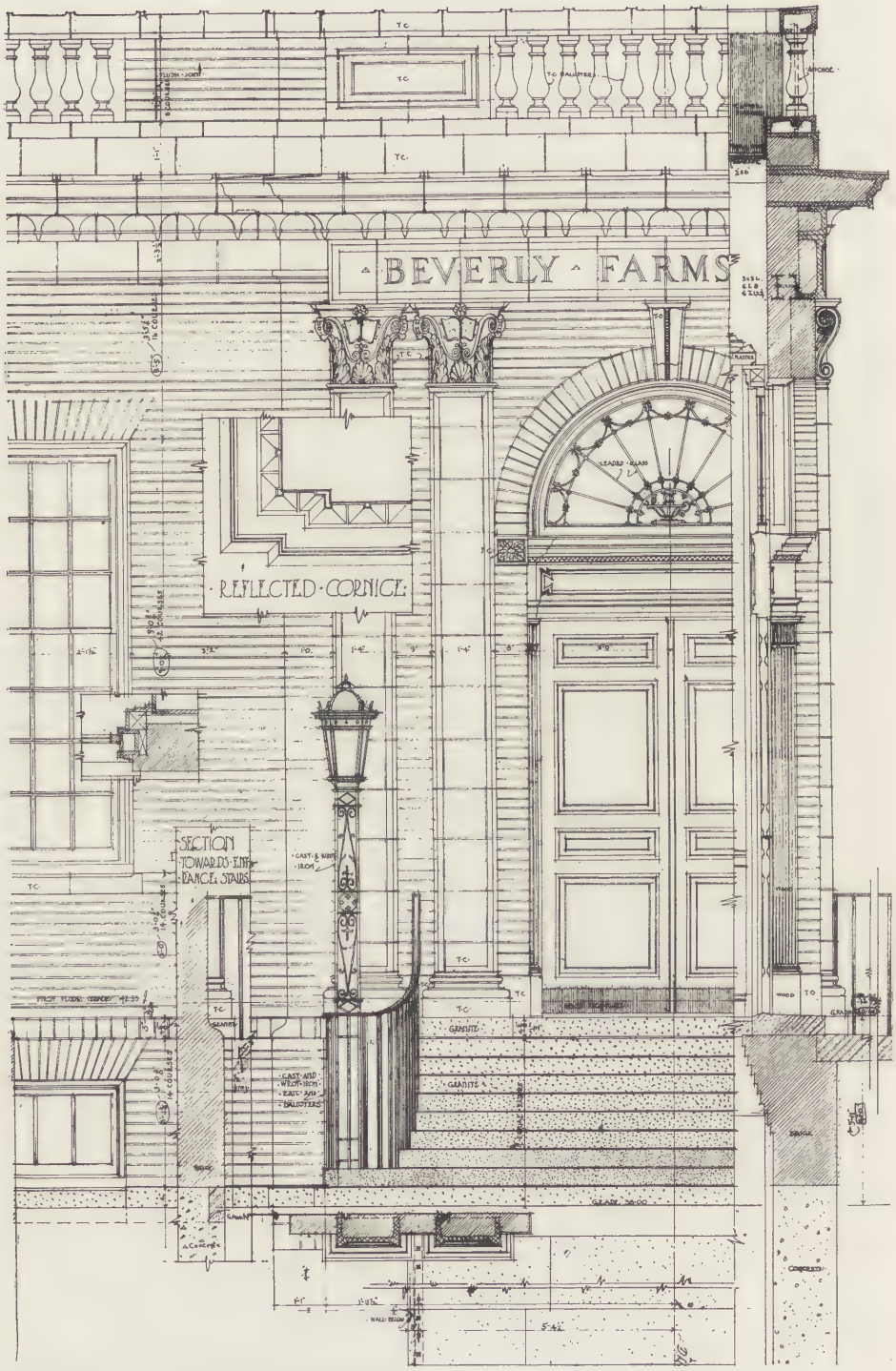
The brickwork is simple English bond throughout, relieved by brick quoining and a moulded water-table at the base. The cornice is one of the most interesting features of the elevation. The use of the corbeled bed mould is rather unusual even in Colonial work, and in this case gives just about the right amount of light and shade. The balusters of the attic are of a very satisfactory design, but one feels that the corners might have been strengthened by the continuance of the quoin treatment of the wall below.

On entering we find that the reading room is practically divided into two sections for convenience of use, by book-cases flanking the entrance and by the delivery desk opposite. The right-hand portion is for use by the children, and the whole is easily controlled from the central desk.

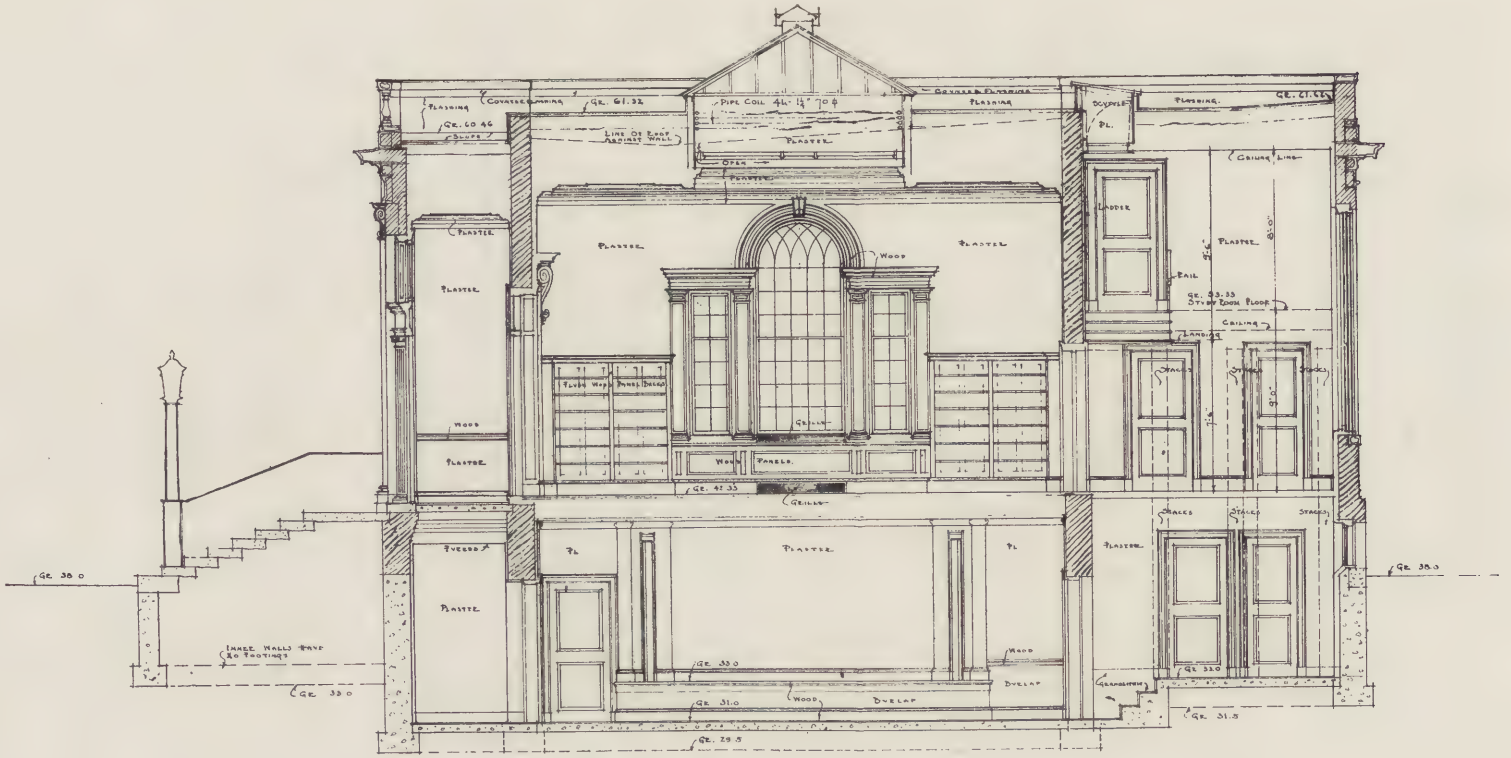
The entire expression of the room is one of quiet coolness without being either cold or formal. The walls are of a soft low intensity green, fairly high in value, which harmonizes excellently with the



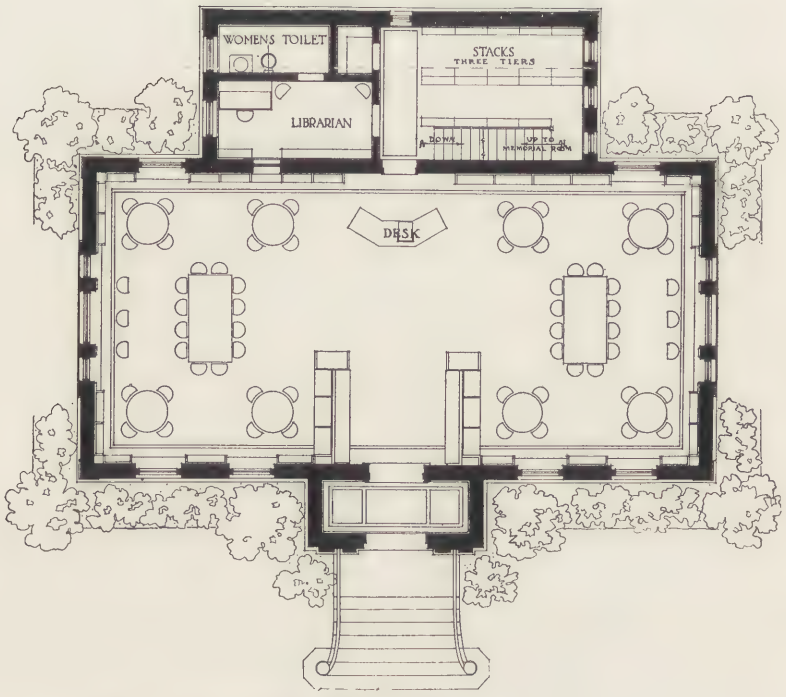
BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS. LORING & LELAND, ARCHITECTS.



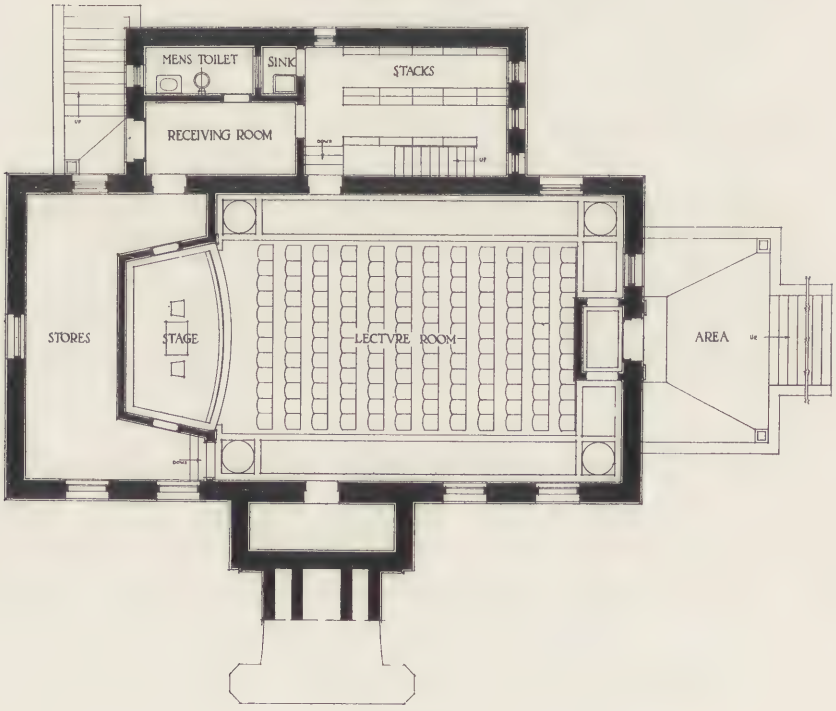
EXTERIOR DETAILS—BEVERLY FARMS
LIBRARY, BEVERLY FARMS, MASS.
LORING & LELAND, ARCHITECTS.



SECTION THROUGH ENTRANCE—BEVERLY FARMS LIBRARY.
BEVERLY FARMS, MASS. LORING & LELAND, ARCHITECTS.



Main Floor.



Basement.

FLOOR PLANS—BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.
Loring & Leland Architects.

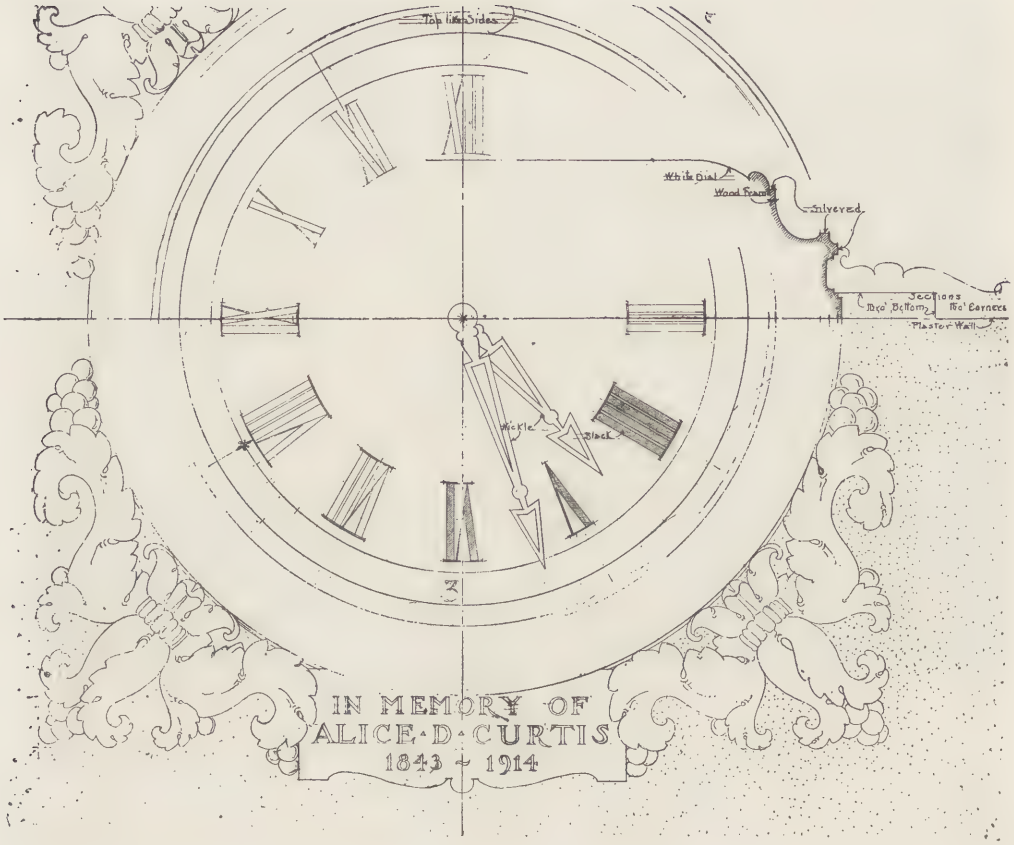


READING ROOM—BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS.
Loring & Leland, Architects.

special finish of the oak woodwork. The latter is treated with a preparation which lowers it slightly in tone and gives it a mellow quality exceedingly agreeable to the eye. To correspond with this scheme, the lighting fixtures are of a silver finish. This color problem had to be given special attention by the architects, for, as suggested above, the library, while given perhaps greater use during the summer, also had to serve the permanent residents of the town. This meant the development of a scheme which, while remaining becomingly cool in the summer, would not become icy in the winter through lack of sufficient body.

Aside from the propriety of the color, however, the detail of the wood finish has been well and conservatively handled. The interior finish of both the entrance and the Palladian window is good in proportion as well as in detail. The furnishings are simple also, but in accord with the architectural treatment. In connection with this, attention should be called to an interesting utilitarian device, by which the edges of the book shelves are so profiled that they serve as a continuous slide rack for cards indicating the contents of the shelves, thus avoiding the necessity of expensive metal holders. Another device worthy of imitation is in the arrangement of the grilles under the windows which screen the radiators of the heating system. Cold air is admitted through a grille in the baseboard, heated by contact with the radiator and allowed to escape through another grille in the sill. So far this is commonplace; but, instead of being horizontal, the sills are sloped inward at an angle of some twenty-five degrees. This sends the heated air away from the wall by means of a reflector on the inside and prevents both the soiling of the shades by deposit of dust and the stoppage of air circulation by the placing of books and wraps upon the sill.

A simple moulded cornice makes the transition between the walls and ceiling, the centre of which is broken by a circular skylight with an excellent arrangement of radial tracery. This adds not a little to the lighting of the room and re-



DETAIL OF CLOCK IN READING ROOM—BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS. LORING & LELAND, ARCHITECTS.



DESK AND CLOCK IN READING ROOM—BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS. LORING & LELAND, ARCHITECTS.



MEMORIAL GATE—BEVERLY FARMS LIBRARY, BEVERLY FARMS, MASS. LORING & LELAND, ARCHITECTS.

lieves the central portion from the gloom which would otherwise result from the lack of direct wall fenestration at this point. As it is, the lighting is excellent, both on account of the ample window space and the light tones of the walls and wood finish. Artificial illumination is given by six direct-indirect electroliers suspended from the ceiling and by individual table lamps. The design of these fixtures is excellent and makes free use of distinctively Colonial patterns, as may be seen in the accompanying illustration.

Behind the attendant's desk and above the door leading to the working portion a special memorial clock has been placed. The body of the clock could not be sunk in the thickness of the wall, and the problem of architecturally tying this "pill box" form to the wall surface had to be faced. The result is a credit to the ingenuity and good taste of the designer. A series of mouldings takes in about half the depth of the clock. From there on the circular form is run out into a square and back to the plane of the wall by a frieze in deep relief of "Grinling Gibbons" carving, which successfully solves the problem. A reduction of the full size drawing of this clock accompanies this article, and an idea of its relation to the wall surface can be obtained from the illustration.

The door below leads onto a short balcony, open to the stack well on the right and giving access to the librarian's room, women's toilet, etc., on the left. The mezzanine above contains a room intended for special collections of various natures and contains Lowell's desk and other memorials. From the librarian's room a small window opens into the reading room, giving the librarian extra control without leaving her private office. The two tiers of metal stacks, to which will eventually be added a third, are built up from the basement floor and give ample space for future growth in the collection.

At the basement level is a receiving room with direct access from the outside, the men's toilet and a closet with sink for the caretaker. A few steps below this level a small door leads to the lecture hall, to which public admittance is gained by the area entrance mentioned above. The hall can accommodate about 100 to 150 seats, and contains a fair-sized stage as well as a small vestibule at the entrance. Behind the stage there is a good space for storage or other purposes (at present used by the local Red Cross), access to which is obtained through a door on each side of the stage or directly from the receiving room.

The size of the hall was, of course, rendered possible only because an individual heating plant was not needed, all the heat being drawn through an underground duct from the fire-engine house just on the edge of the lot at the rear. The illumination from the six windows, owing to their position half below grade, is somewhat scant in the daytime, but, as the hall is generally used for affairs in the evening, this is of small account.

One of the striking features of this building is the efficient manner in which every available bit of space has been utilized, which is a source of much satisfaction to those in charge.

The lot upon which the building stands is some 165 feet by 235, of which the building occupies approximately 9,000 square feet. Part of the land was originally given for a public playground, and it is intended eventually to lay it out for that purpose, thus affording the building a better setting than is now given. War economy having postponed the carrying out of the planting, the setting of the structure is not yet satisfactory.

An entertaining view of the little building is obtained from Hale street, through a memorial gateway of wrought iron, showing the upper part of the entrance to the lecture hall and its relation to the window above. This gateway designed by the architects is much more fortunate in conception than the lamp standards flanking the entrance steps. The latter seem rather out of scale and detract from the dignity of the order behind.

By and large the particular problem seems to have been solved with considerable success both from the practical and artistic standpoints. The building was completed within the appropriation of $30,000, a not overlarge amount for a structure of such finish.

LATROBE'S DESIGNS FOR THE CATHEDRAL OF BALTIMORE

BY FISKE KIMBALL

Part I

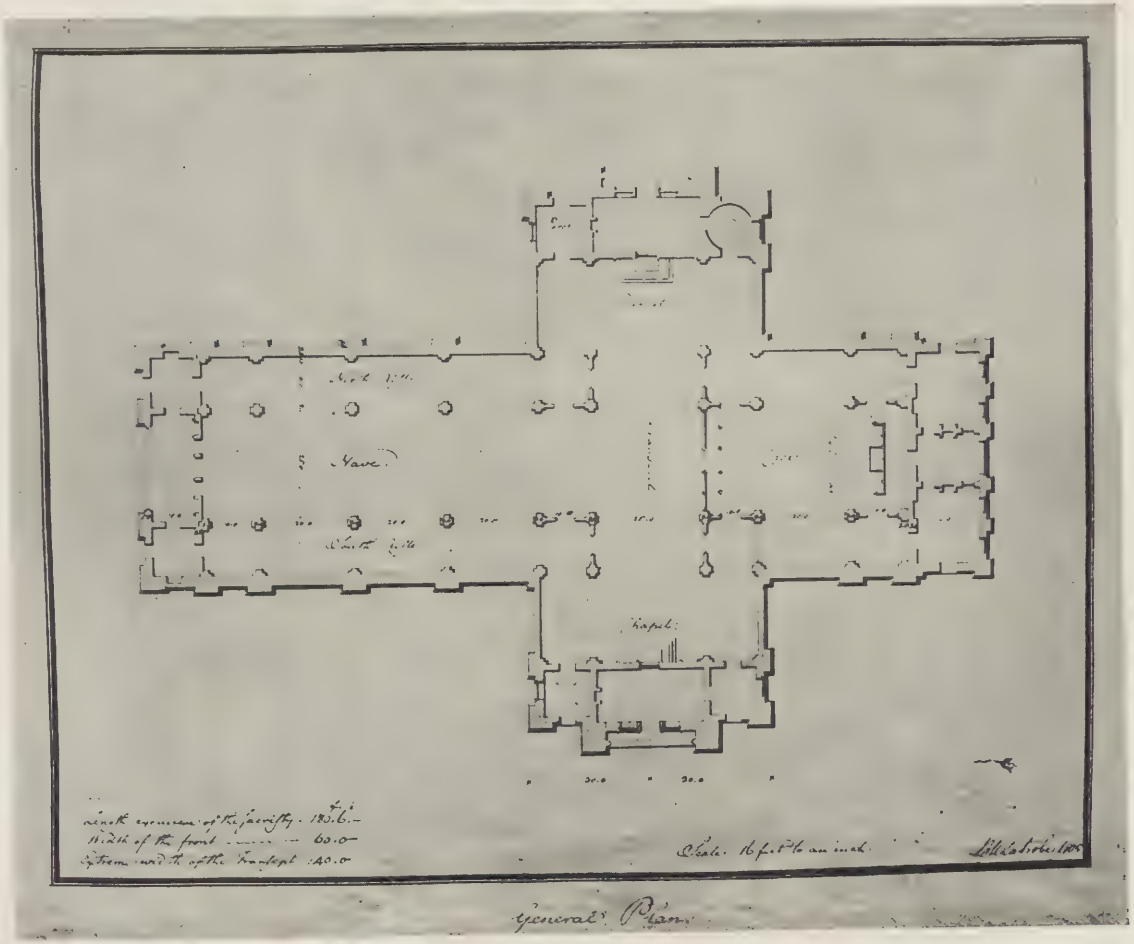
WHEN Bishop John Carroll undertook to build a cathedral for the Catholic diocese of the United States the country afforded no model for such an edifice. The See of Baltimore, erected in 1789, coeval with the establishment of the federal constitution, was the first religious jurisdiction in America having a national scope. Pius VI wrote, in the Bull which created it and made Carroll bishop: "We commission the said bishop-elect to erect a church in the said city of Baltimore in the form of a Cathedral, inasmuch as the times and circumstances may allow." The national character and the ambitions of the church were in striking contrast with its actual condition and means. St. Peter's church in Baltimore, which became Carroll's pro-cathedral, was but an aggregation of small buildings of domestic character, dictated by the pre-Revolutionary laws against holding Catholic worship except in private houses. Poor as this building was, it was then by far the most elaborate Catholic house of worship in the United States, with the possible exception of St. Mary's in Philadelphia.

In the churches of the dominant Protestant sects also there was little which could furnish inspiration for the design of a cathedral. The Puritanism of the New England colonies had proudly renounced every appeal to the senses, and worshipped in halls of barn-like asceticism, such as the Old South in Boston.

The Anglican church of the day, itself strongly Protestant, had little elaborate ritual or diocesan coherence. Its best churches, the best of the colonial period—St. Philip's and St. Michael's in Charleston, Christ Church in Philadelphia, King's Chapel in Boston, and St. Paul's in New York—were modeled on the London parish churches of Gibbs. They had indeed a basilican nave, but no development of chancel or transepts, and nothing in their external aspect suggestive of more than a parochial significance. The nave with a single western tower had always been indissolubly associated in England with the parish church. Classical details and a portico did nothing to shake this association. The accepted Colonial scheme, taken over bodily from Protestantism, had to suffice for Bulfinch's Church of the Holy Cross in Boston (1800-03), but would never do for a cathedral for the Catholicism of a whole nation.

Even foreign cathedrals, in reality, could offer less direct inspiration than one might think. The great period of cathedral building had been the Middle Ages; the cathedrals of the mother countries were Gothic, a style little known to the Americans of 1800. St. Peter's and St. Paul's, the outstanding examples of cathedrals in Renaissance forms, were on such a vast scale as to preclude imitation, and they were already attacked by the adherents of classical purism. The classicists, however, had had no cathedrals to build. Their nearest approach to one was Soufflot's church of St. Geneviève, the composition of which well fitted it for a national Pantheon. In truth the building of cathedrals had stopped in the old cities of Europe, and the one now to be built on the frontier of Christianity and civilization presented a new problem.

To cope with the problem there was in Carroll, a man of energy and tact, having wide European observation and eagerness to secure the best professional advice available. An American of prominent family, he had studied and taught for twenty years in the Jesuit schools and colleges of Flanders, and had toured Europe, England, and Canada. His



PLAN OF LATROBE'S
GOTHIC DESIGN (I).

helpers, although loyal, were lacking in ideals and experience. Building committee and builders alike were unprepared for the task of erecting a building of the very character of which they had scarcely a conception. With the best intentions they could not succeed without finding an architect of skill and knowledge transcending the narrow experience and book-learning of the best post-Colonial designers.

Although much of the correspondence relating to the design of the building has been published as part of the *Cathedral Records,* the designs themselves have hitherto escaped search. The collection of Mr. F. C. Latrobe of Baltimore, however, proves to include many drawings of the cathedral quite equal in interest to the executed work. Of the seven successive designs which were prepared by his ancestor, the architect, he has drawings representing four, from which, and other evidences, the provisions of the intervening designs may also be deduced. It thus becomes possible for the first time to understand the architectural history of the cathedral, and to appreciate more fully its extreme importance in the history of American architecture.

The first attempt to produce a design for the cathedral was apparently a volunteer one. Dr. William Thornton, who was a friend of the Carroll family, gave the Bishop a sketch, now, unfortunately, not to be found in the cathedral archives or in the various collections of Thornton drawings. This design, like all of Thornton's, did not fail to recognize the importance of the edifice; but it seems to have had difficulties, like Thornton's plan for the Capitol, arising from the author's lack of fundamental training in coördinating the details of a complex project. Bishop Carroll was evidently not wholly satisfied, for he had it submitted to Latrobe for an opinion. To us such a submission might seem contrary to the ethics of the profession, but as Latrobe was ignorant of the authorship of the design and made it a rule to charge nothing for any services to religious or educational bodies, it may be pardoned. The design called for some fifty-four Corinthian columns thirty feet high, with a "tower or dome" resting on certain of these without either piers or relieving arches. Latrobe's criticism, from which we obtain the meagre knowledge we have of it, was that it was too expensive, and incapable of erection in stone for constructive reasons.

Latrobe, who was now invited to submit a design, and who offered his services freely, was far better equipped to solve the difficult problem in hand. The professional pupil of the elder Cockerell and of Smeaton, and himself an architect who had been honored with offers of the highest posts in the gift of England and America, he had the artistic ideals and the practical experience of both hemispheres. He had, moreover, the gift of keen analysis of a program, which was here urgently required.

On April 16, 1805, he submitted two designs, "'the one in Gothic, the other in Roman style." Both conformed in plan to a report by which Latrobe hoped to educate the building committee as to the requirements for a cathedral. In this he laid down as axiomatic a Latin cross form with side aisles and a large development of choir and transepts. Regarding the question of style he writes: "The veneration which the Gothic cathedrals generally excite by their peculiar style, by the associations belonging particularly to that style, and by the real grandeur and beauty which it possesses, has induced me to propose the Gothic style of building in the first design submitted to you. . . . I submit the choice to you entirely, having myself an equal desire to see the first or the second erected, my habits rather inclining me to the latter, while my reasonings prefer the first."

A clear-cut choice of style, such as Latrobe offered, was itself a new thing on this side of the Atlantic. There had been, indeed, many crude survivals of traditional Gothic building in the Colonies during the seventeenth century and even in certain churches of the eighteenth century. When Trinity Church in New York, which was one of these, was first rebuilt after its destruction in the Revolution, a supposedly Gothic style had been retained, although "im-



SECTION OF LATROBE'S GOTHIC DESIGN (I).



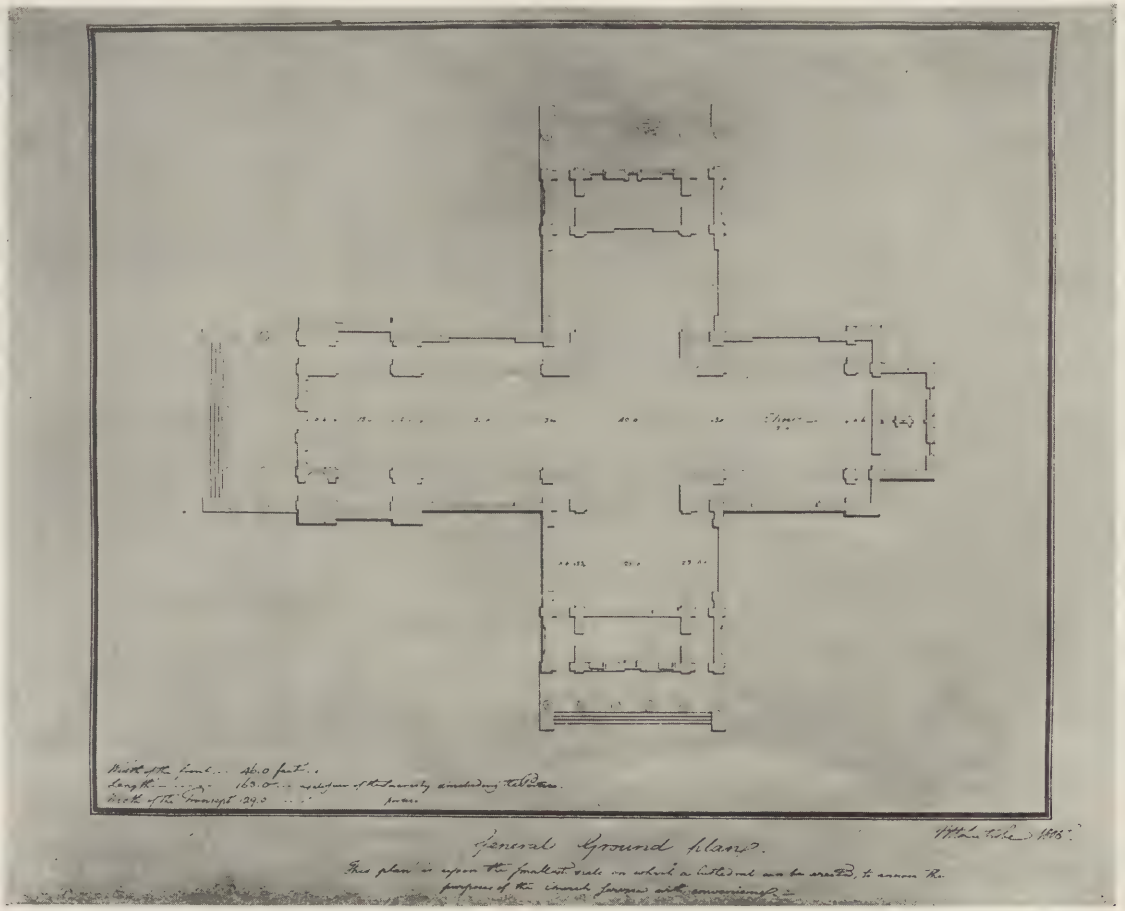
NORTH FLANK OF LATROBE'S GOTHIC DESIGN (I).



WEST FRONT OF LATROBE'S GOTHIC DESIGN (I).



INTERIOR OF LATROBE'S
GOTHIC DESIGN (I).



PLAN OF LATROBE'S
FIRST ROMAN DESIGN (II).



SECTION OF LATROBE'S
FIRST ROMAN DESIGN (II).



SOUTH FLANK OF LATROBE'S
FIRST ROMAN DESIGN (II).

proved by rules and proportions" after the manner of Batty Langley. Latrobe, however, brought for the first time a real knowledge of Gothic in its great period, which had been acquired by the pioneers of the Gothic revival. In England, the home of this movement, experiments in building with this style had been progressing for fifty years with increasing success, and results already by no means contemptible. There the principal Gothic designs had been for country seats, which Latrobe had emulated in his design for Sedgeley near Philadelphia. No cathedral in revived Gothic forms had yet been attempted in England, and outside of England no Gothic church had yet been projected in modern times.

Latrobe's Gothic design (I) for the Cathedral, although still lacking in the sympathetic understanding of detail which came first with Ruskin fifty years later, is not unacceptable judged even by present standards of knowledge. It had a clerestoried nave and aisles vaulted throughout in masonry, with grouped vaulting shafts carried to the ground, and vigorous wall buttresses. The difficulty produced at the crossing by the narrowness of the aisles, treated merely as passages, was overcome by a rhythmical bay motive carried into the choir and transepts. The west front of the nave was given a deep arched opening like one of the arches of Peterborough, with the aisle fronts carried up to the same height; the transepts had a shallower great arch, but with the silhouette of nave and aisles revealed. A low central lantern dominated and unified the exterior, which could not have failed to be very impressive, with its cliff-like walls and deep shadows.

The alternative "Roman" design (II) is equally advanced in relation to the tendencies of the time. It is on the general scheme of the Pantheon in Paris, but is made even more severely classical by the substitution of a Roman saucer dome for the tall Renaissance dome of its prototype. The plan involves an ingenious avoidance of the weaknesses of Soufflot's, in that the angle piers are strengthened, and the *ports à faux* of Soufflot's dome are lacking. The narrow aisles which flank both nave and transept are carried through the piers diagonally, and the adjustment of the Latin cross within an essentially Greek cross scheme is managed with great facility. The lunettes which light the interior are not masked as in the Pantheon or St. Paul's, but expressed on the exterior with a frankness which is characteristic of Latrobe's structural purism. The main cornice outside is placed at the height of the impost within, thus producing an attic.

Although Latrobe later expressed his preference for an order the full height of the building, which had distinguished Soufflot's design, he felt at first that he must adopt "the old and not very elegant idea of an attic" to decrease the scale and expense. Despite this concession to academic formulae the design is notable for its grandiose and monumental classical character. On either plan the building was sure to be noble and appropriate.

Coucy-Le-Château A Victim of the War

By Richard F. Bach

RECENT accounts of the strategic retirement of the Germans to the now historic Hindenburg line—in the course of which for alleged military reasons ruthless destruction was visited upon an untold number of buildings of varying antiquity and present educational value—granted only casual notice to the intentional razing of Coucy-le-Château, the foremost monument of European military architecture of the so-called age of chivalry, up to the moment that it suddenly rose as a cloud before the eyes of the advancing French army.

Coucy represented one of the most stupendous building undertakings of its time, both as to actual size and as to military strength. It was a typical feudal castle, originally built by Enguerrand III in the thirteenth century, and undertaken as a complete project at the time of its erection and not, as is so often the case with medieval buildings, the result of many scores of years of slow accretions at the hands of successive owners. It was later bought by Louis d'Orléans, builder of that other splendid structure, Pierrefonds; passed to the French crown in 1498, and was dismantled by order of Louis XIVth's crafty Italian minister, Mazarin, in 1652.

From the standpoint of defense the position chosen for Coucy was ideal. A total area of some ten thousand square yards, favored by very steep approaches, was chosen at one end of a plateau near the city of Noyon. A considerable section of the area selected was given over to extensive buildings (see perspective, Fig. 1) not very strongly fortified, the purpose of which is not now known and of which only an occasional vault or column remained before the war; there was here, however, outside the heavy walls of the castle proper, a chapel of a date probably much earlier than the thirteenth century.

As in the case of all feudal castles, the main establishment was erected as a dependency of the donjon or keep, an immense masonry tower, amply provided with all needs of sustenance from well to cattle stalls, and catering to all human requirements from simple military protection to the customary dungeon for the quick elimination of undesirables. The donjon of Coucy gave upon the open plateau area between Noyon and the castle itself (see plan, Figs. 2 and 3). It was flanked by two smaller angle towers connecting with the donjon by means of curtain walls, of which one was pierced by the only entrance reached by a bridge defended by three pairs of double towers and thrown across a moat which was itself over sixty feet in width. The entrance, which was heavily protected by portcullis, thick wooden iron-studded doors, drawbridge and other accessories, led to a residence building, of which the ground story was used as a barracks; through its centre ran a corridor, vaulted and provided with perforations above through which missiles might be dropped or lead or oil poured hot. The corridor debouched upon the open courtyard of the castle, while the four-story building of which it formed part connected with and used as a side wall the exterior eastern wall of the whole enclosure. Along this wall were constructed service buildings three stories in height, providing living quarters for help or for retainers. The northeast and northwest corners were again carried out in form of circular towers; while between them, in the most inaccessible position in the plan, were built the chief residential quarters, again vaulted in the lowest story as in the case of all the other structures thus far mentioned. Following around to the western side of the plan, we find the whole of the available exterior wall space used as part of an immense storage maga-



FIG. 1. COUCY-LE-CHÂTEAU. GENERAL PERSPECTIVE.

zine for every manner of material and food provided against an extended siege. Storage facilities were also accounted for in a cellar level beneath this enormous building; in fact, there were a number of such possibilities in the understructures of practically all portions of the plan, except the courtyard. Projecting from the inner side of the storage building was the castle chapel. Kitchens seem to have been arranged for in the space adjacent to the chapel, but separated by a small yard from it and the donjon which occupies the centre of the southern elevation. The four corner towers had an understructure of three stories—a sort of superposition of three constructed caves—and three more stories above ground level. Their height was slightly over one hundred and fifteen feet and their diameter about sixty feet. Beside these dimensions the donjon itself was a mammoth, measuring over two hundred and ten feet in height and over one hundred feet in diameter. Around the base of the donjon was built an additional walled enclosure, set at some distance from it and forming part of the general curtain wall. In one end of this enveloping arc a small postern, with the usual protection of heavy doors, ceiling perforations, etc., made possible an exit to the escarpment on the opposite side of the moat; while the base was penetrated throughout its curve by a passage contrived no doubt as a means of detecting mining operations, since it was constructed at the level of of the bottom of the moat. At this level also was discovered a spring of pure water which solved a most serious problem; the location of this essential was of greatest benefit to the inhabitants, since it was absolutely inaccessible, except through the entire defenses of the building or, to be sure, through treachery.

Properly to restore the buildings of Coucy the imagination must recall the character of the vaulting, the profuse painting of the vaults, the frequent use of trussed roofs and the carving of projecting members, the delicate carving of capitals and occasional window treatments, not to mention the general architectural excellence of the chapel itself. To crown the whole effect we have the general quality of picturesqueness due to site and, in addition, also to man's efforts to circumvent possible attack.

The donjon of Coucy will merit a more detailed description, for in the days of its early greatness the donjon was the proper residence of the feudal lord or seigneur. This giant structure was contrived in the form of an exact circle in plan, accessible from the courtyard of the castle only by means of a very narrow door and passageway with accessory protections of portcullis, etc., as usual, and set off entirely from all other parts of the general plan by means of a smaller encircling wall, as indicated above, between which and the tower itself lay a moat slightly over twenty-five feet in width and about sixteen feet beneath the sill of the narrow entrance. The usual drawbridge was thrown across the moat to connect with the open courtyard. From a narrow entry, or postern, a short corridor or passage leads through the wall of immense thickness—that is, one-fourth of the total diameter of the tower, or a matter of about twenty-five feet of masonry as measured above its slanting or battered base—and in the thickness of this wall were contrived toward the right a spiral stair tower, or rather stair well, which served all upper levels of the structure, and toward the left a short passage leading to conveniences, thus placing the latter entirely out of direct communication with the central open space for purposes of sanitation.

A well driven to a depth of one hundred and ten feet was located at the right immediately on entering the great vaulted room forming the ground story of the donjon, occupying one of twelve rectangular recesses in the thickness of the wall (see plan, Fig. 5), all of which are of equal size, excepting that occupied by the well and that required for the entrance. These twelve niches, oblong in plan, correspond to as many vaulting compartments, the strongly projecting ribs of the radial vault striking against an annular oculus above and forming a series of deep penetrations, in the full height of which the square-backed niches were carried up in a double tier, the up-

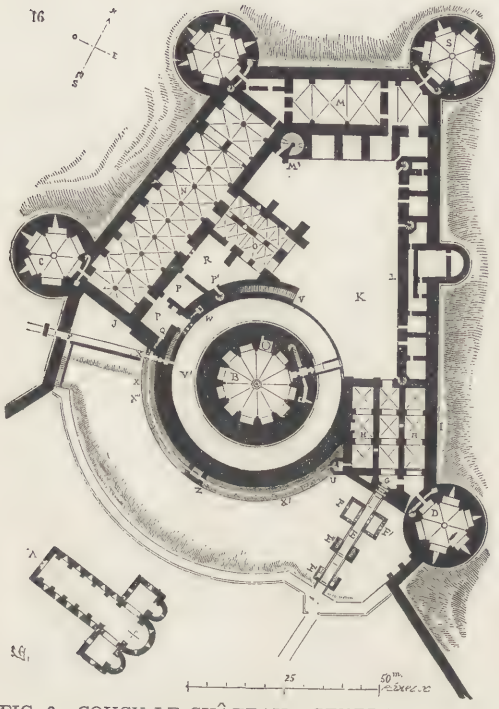


FIG. 2. COUCY-LE-CHÂTEAU. GENERAL PLAN, MAIN LEVEL.

per level being formed by the level of a cornice above a series of pointed arches. The great vaulting ribs spring from small shafts with finely cut capitals set against the wall spurs projecting between the niches just mentioned. The only source of light is found in two small square windows set very high.

In the second story (see plan, Fig. 6) we have practically a duplicate of the first. There is provision for meagre lighting in this case, however, in the form of three small windows. There are again twelve oblong niches, three occupied by narrowing passages leading to the windows, one giving upon a very narrow passage connecting with a small bridge thrown across to the enclosing curtain wall, a fourth giving access to the circular stairway, and a fifth occupied by a fireplace with chimney (see section, Fig. 4), the latter not by any means the customary thing at this stage in architectural history. The vaulting ribs in this case again strike against a circular opening in the crown, the purpose of such openings being to provide an easy means of carrying supplies from floor to floor, especially missiles to the roof, since a vertical hoist could easily be contrived to serve all three levels.

In the third story (see plan, Fig. 7) interior we have a splendid example of medieval design, a conception of almost terrible dignity and as good an illustration of the decorative treatment of distinctly military buildings as can anywhere be found in feudal times. The great hall, a twelve-sided polygon in plan, is vaulted radially, the ribs again springing from carved capitals set on slender shafts, the latter placed against deep piers disposed on the radii of the dodecagon of the plan, but each pier is pierced at the main floor level and also at the level of a gallery raised about ten feet above it. By this means large accommodations were afforded, and it has been estimated that no less than one thousand retainers could be grouped together in this hall and its galleries, so that all might hear simultaneously some general pronouncement as to law or mutual defense of the castle. At this level the wall has been decreased in thickness about two-thirds, and in the space thus

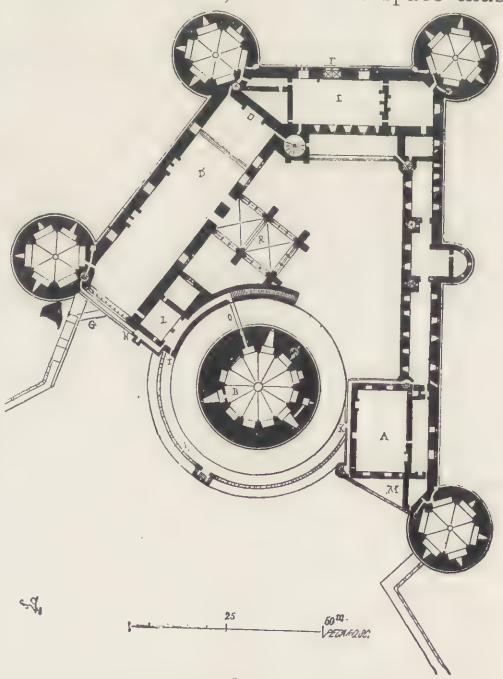


FIG. 3. COUCY-LE-CHÂTEAU. GENERAL PLAN, SECOND STORY LEVEL.

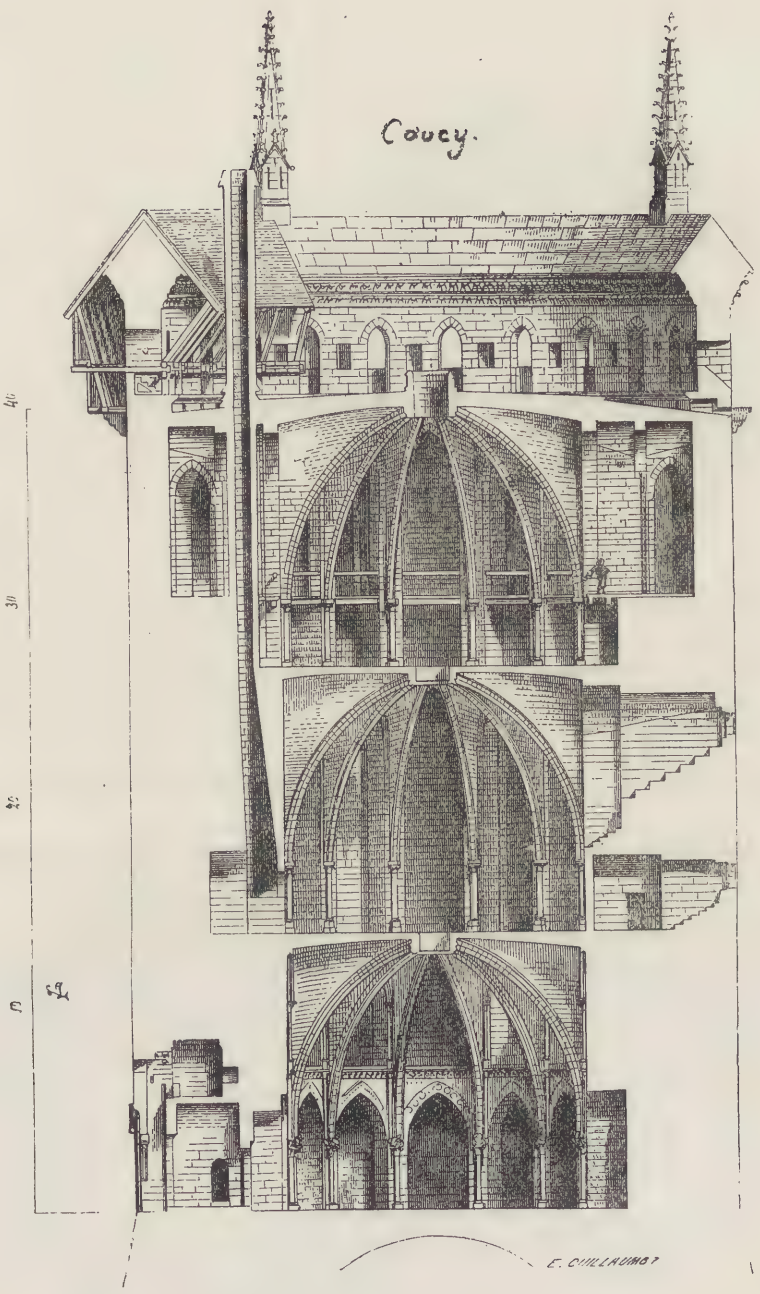


FIG 4. COUCY-LE-CHÂTEAU. SECTION OF DONJON OR KEEP.

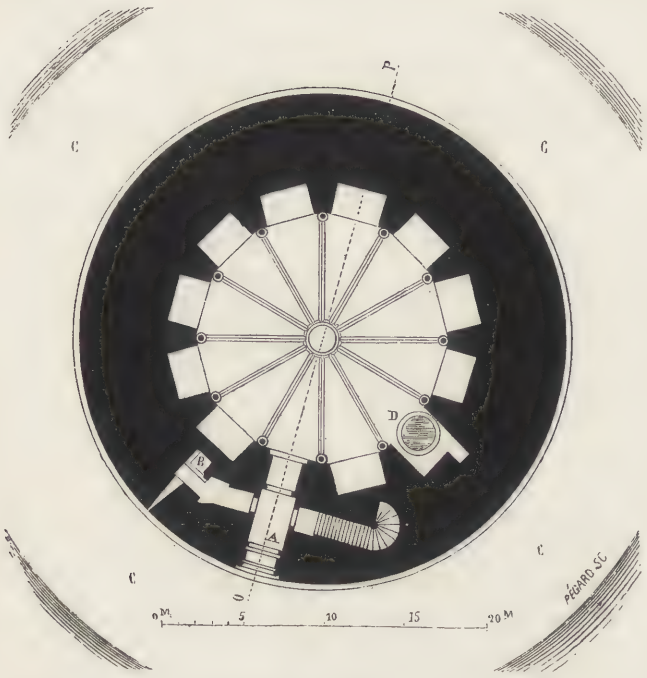


FIG. 5. COUCY-LE-CHÂTEAU. GROUND PLAN OF DONJON OR KEEP.

gained deep recesses give additional floor area. Since the chief source of light was the central opening in the roof, but two windows were built into this story. The stair well was itself lighted by slit windows throughout its height.

The roof (see plan, Fig. 8) of the donjon served, as was the case in all similar constructions, as a sort of fighting top. The roof proper was lead covered and the wall of the tower was carried up to a considerable height beyond its level. This wall space was perforated by slit windows alternating with larger openings with pointed heads; although of the size of doors, these were filled in through half their thickness to such height as to make them appear as windows from without. By this means defenders placed in them could operate at freedom and without interference from the activity of those furnishing supplies and missiles on the roof area. On the exterior wall at the roof level were built a number of brackets in stone; these served as supports for an additional wooden gallery (see section, Fig. 4), which, projecting from the wall face, could command a full view of the base of the tower without exposing the defenders. Between the stone brackets supporting this wooden gallery were left a series of openings to assist in the construction of the gallery, as sockets for beams, and also to serve as convenient points from which to drop missiles.

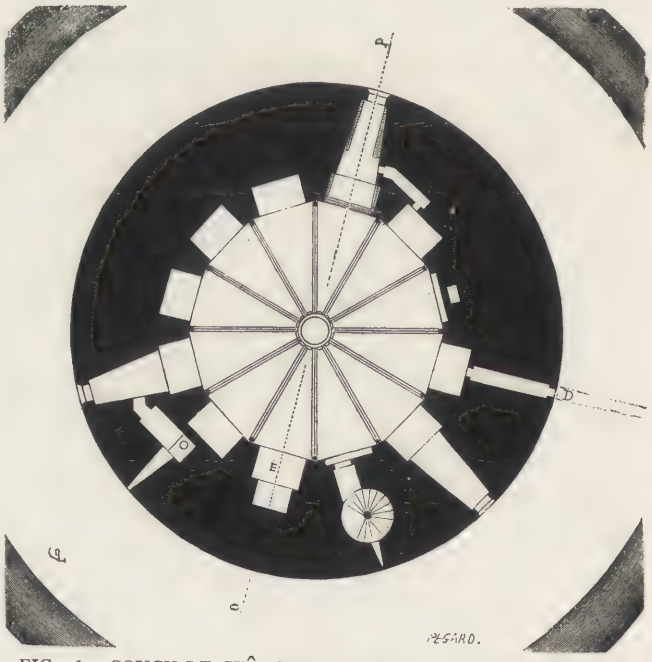


FIG. 6. COUCY-LE-CHÂTEAU. SECOND STORY PLAN OF DONJON OR KEEP.

The heavy wall or battlement terminated in a cornice, projecting both inward and outward, and covered with a gable roof. Four pinnacles, with finials and crockets, lent a gratifying decorative touch to the heavy exterior.

To visualize the effectiveness of the donjon in its pristine structural integrity, it will be necessary to restore also the interior decorations, carried out in fresco on a thin coat of plaster which covered masonry walls left quite rough in expectation of such covering and painting. We must also visualize the paintings of chivalric scenes to serve not only as reminders of the glory of the owner's crest, but also as a means of impregnating the minds of youths and squires with an adequate sense of the importance of certain military and other feudal virtues. Add to this the glint and rattle of armor and the fine color and movement of loose garments of women, and restore heavy hangings and crude oaken furniture, and we have but a very dim picture of such quality and grandeur as was not attained in any other castle in France. It is not at all difficult to understand the source of inspiration from which the Romanticist draws so continuously and with such gratifying results when we recall but a small fraction of the charm of Coucy.

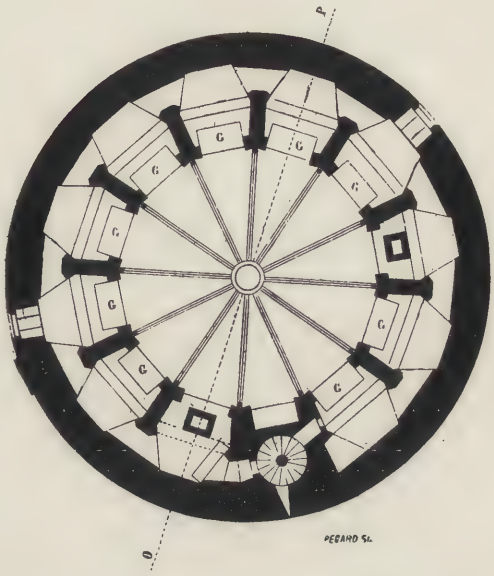


FIG. 7. COUCY-LE-CHATEAU. THIRD STORY PLAN OF DONJON OR KEEP.

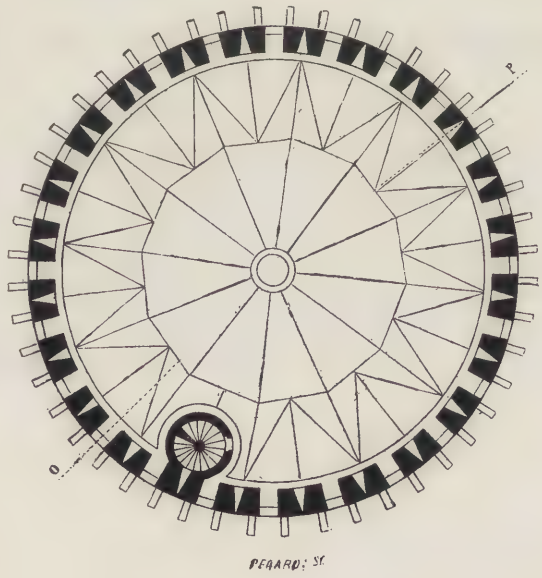


FIG. 8. COUCY-LE-CHÂTEAU. ROOF PLAN OF DONJON OR KEEP.

Note: Illustrations in the foregoing are from Viollet le Duc's *Dictionnaire de l'Architecture.*



DETAIL OF BAY WINDOW—
OFFICE BUILDING OF PERKINS,
FELLOWS & HAMILTON, CHICAGO.

The NEW OFFICE BUILDING of PERKINS, FELLOWS & HAMILTON, Chicago

PLANS of a number of architects' offices have been published; but it is not often that a firm of architects is in a position to design an office building for its exclusive use on land of its own near the business centre of a great city. Tower Court is the name recently given to a short street, in the North Division of Chicago, which passes the west side of the now unused standpipe tower of the first water works built to supply the whole city. The tower was erected about 1855 and is preserved as a monument to the Chicago water system. The building of Perkins, Fellows & Hamilton, at 814 Tower Court, stands opposite the end of another short street about one hundred feet north of the tower. It can be seen from the Lake Shore Drive, which lies between the tower and the reconstructed pumping station still in use; and as its street number indicates, it is eight standard blocks from Madison street, the official east and west central street of Chicago, from which all street numbers north and south are regulated. Chicago avenue, next south of the building, is half a mile north of Madison street.

The neighborhood was once the best built residence district in Chicago, north of the centre; it is now gradually being taken up for buildings of a semi-public nature, and the fine old dwellings are disappearing.

The three members composing the firm are all noted for their artistic attainments; and while the sign over the door announces that they are engineers as well as architects, this announcement is to be understood as meaning that they are competent to do the necessary engineering work connected with the ordinary practice of architecture. They are licensed both as structural engineers and as architects under the laws of Illinois. The building is an illustration of the best engineering practice—it is fireproof and gives evidence of much original construction.

The recent work of the firm has shown a leaning toward the use of Gothic details, a leaning evident also in the present example, which, however, exhibits no direct copying of specific Gothic forms. The ornamental features were not wrought after carefully detailed drawings. On the contrary, they were rather suggested than designed by the architects; they were "controlled" very much as were the carvings of the medieval buildings of the thirteenth century. Everything on the front wall above the base water table and steps is terra cotta, without enamel or even smooth surface. Rough sketches were made by the architects indicating the general size, proportions and projections of the ornaments, and these were all modeled by Emil Zeitler, who had spent several years studying the medieval sculpture at Chartres and other famous works in Europe. Every piece in the front of the building is an original model as it came from the sculptor's hands. Incidentally, the panel over the fireplace is the plaster model made by Mr. Zeitler for a carved oak panel in a country house designed by the same architects. The model is surfaced with dull bronze and relieved with backgrounds of blue and red. It gives the artist's impressions, from memory, of traceries and panel ornaments seen abroad in old work.

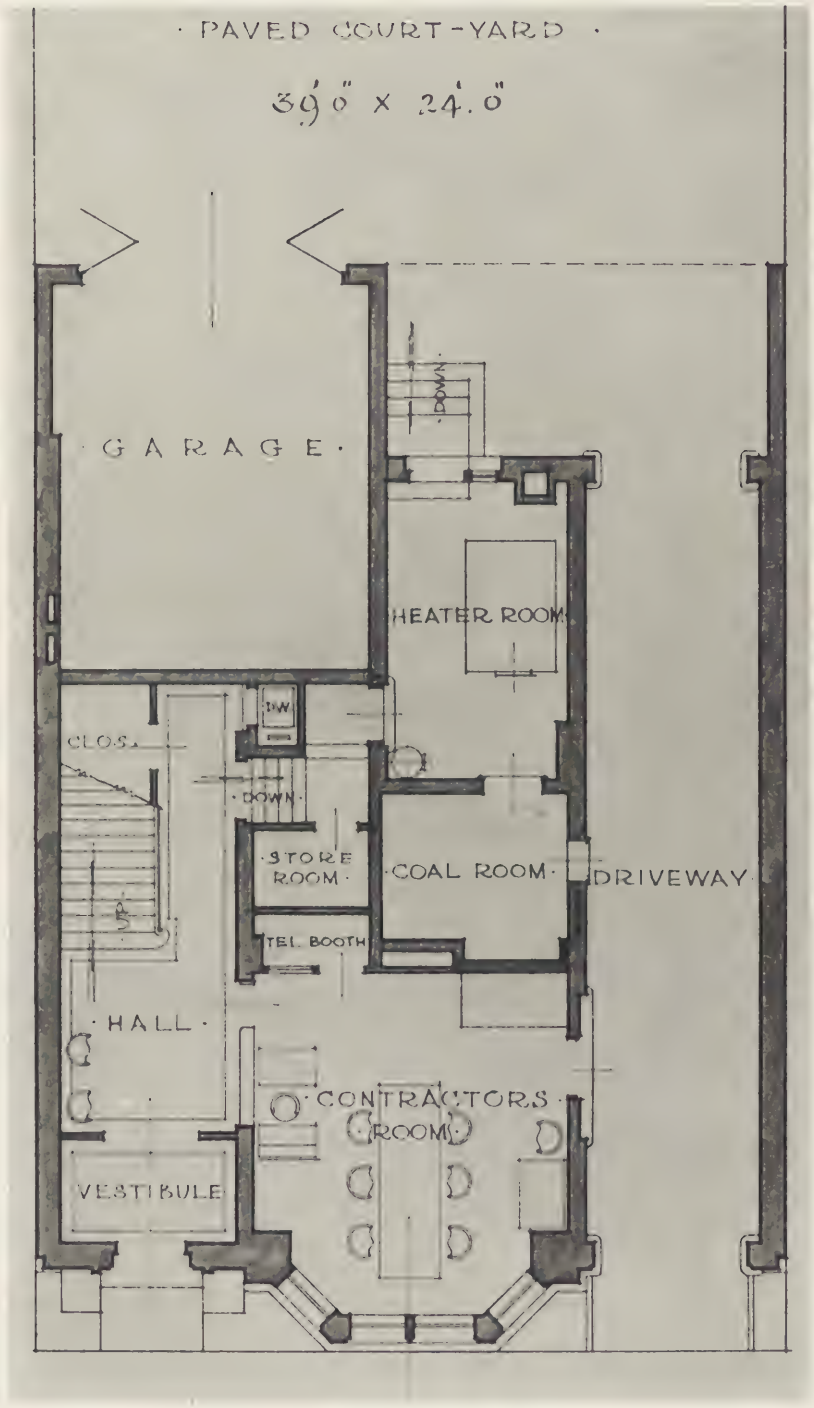
The tendencies of the modern use of medieval Gothic are better shown in a building of this kind than in a church, the details of which are usually minutely copied. There is much work being done now in the Middle West which is not Gothic but which is clearly influenced by it. Such work may frequently be seen in the crowning members of apartment houses and manufacturing plants, where projecting cornices are objectionable for



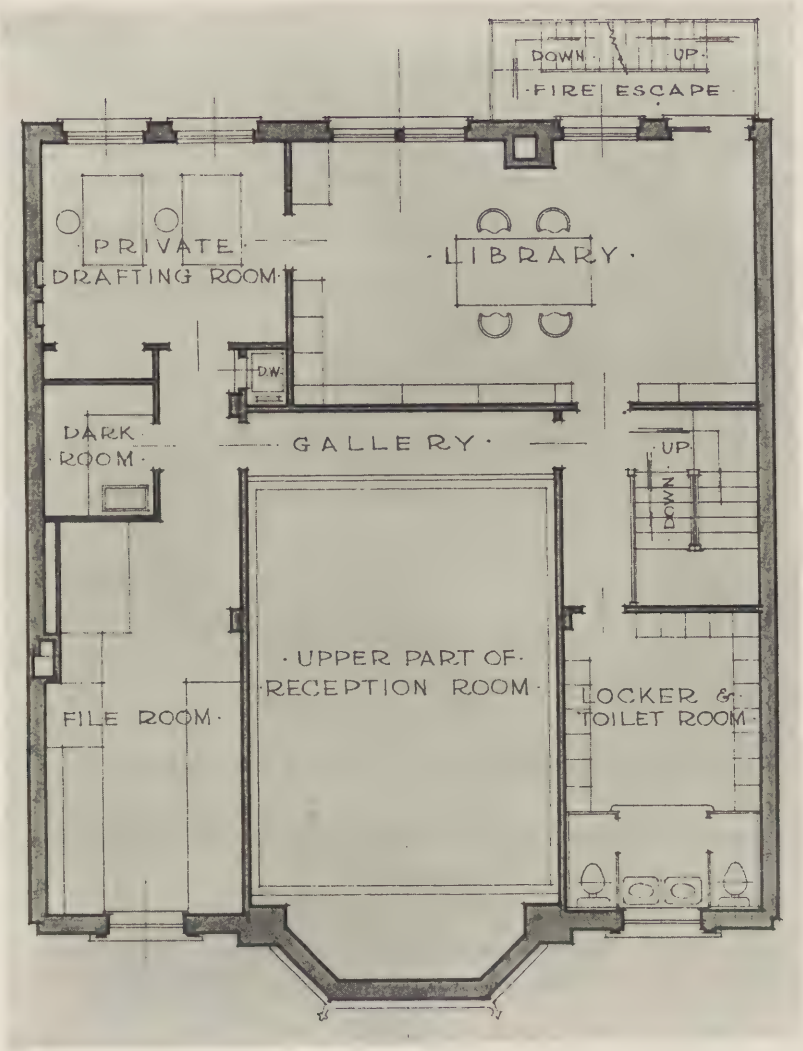
ENTRANCE—OFFICE BUILDING OF PERKINS, FELLOWS & HAMILTON, CHICAGO.



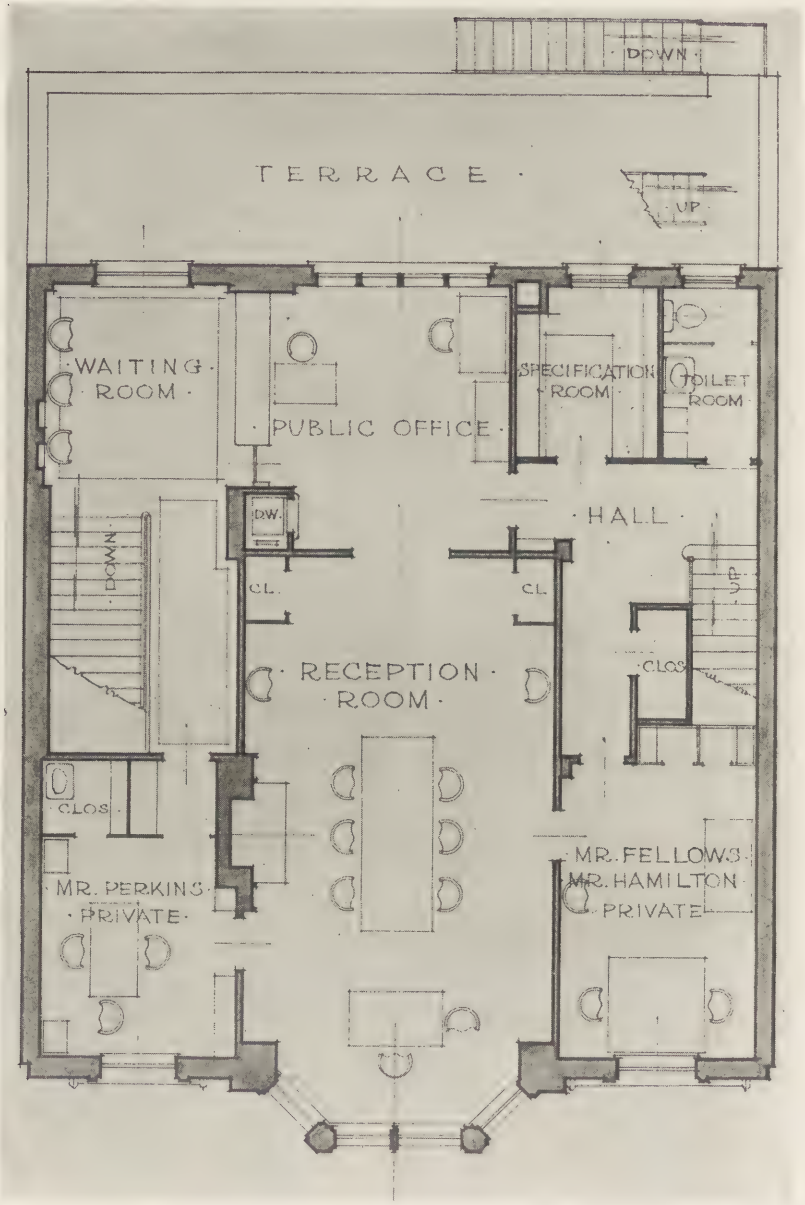
OFFICE BUILDING OF PERKINS,
FELLOWS & HAMILTON, CHICAGO.



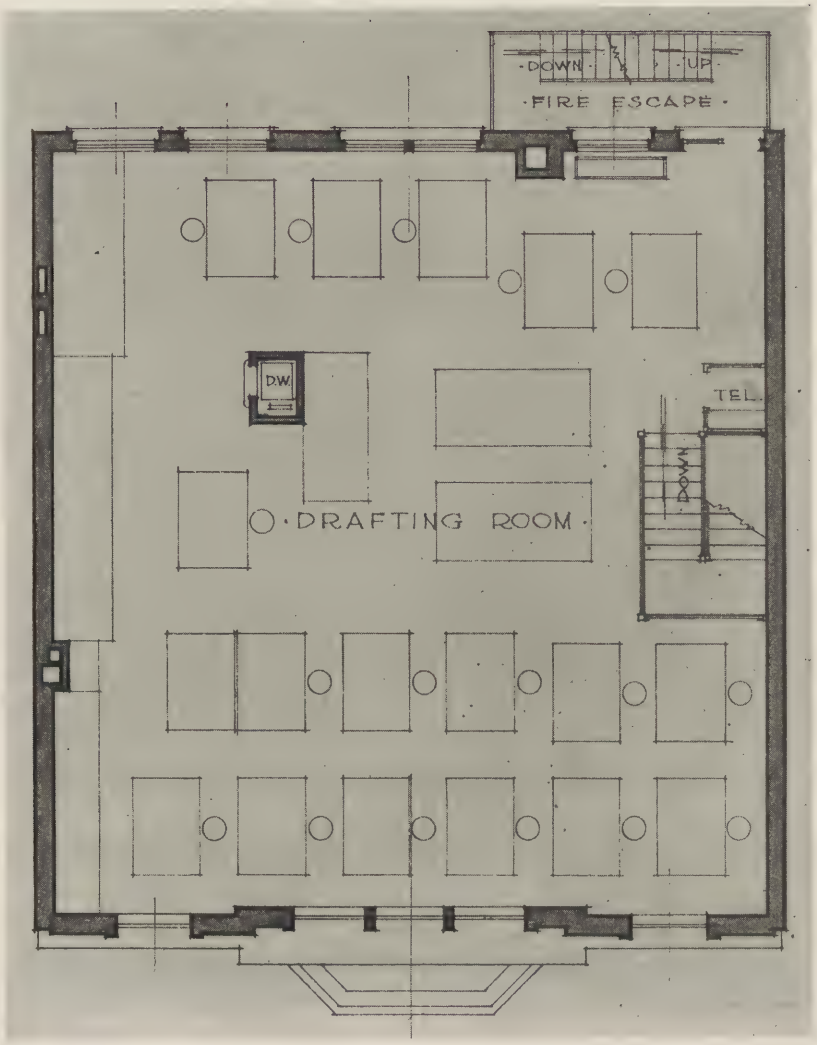
GROUND FLOOR PLAN (LOT 39 BY 80 FEET)—OFFICE BUILDING OF PERKINS, FELLOWS & HAMILTON, CHICAGO.



MEZZANINE FLOOR PLAN—OFFICE BUILDING OF PERKINS, FELLOWS & HAMILTON, CHICAGO.



FIRST FLOOR PLAN—OFFICE BUILDING OF PERKINS, FELLOWS & HAMILTON, CHICAGO.



SECOND FLOOR PLAN—OFFICE BUILDING OF PERKINS, FELLOWS & HAMILTON, CHICAGO.



RECEPTION ROOM—OFFICE BUILDING OF
PERKINS, FELLOWS & HAMILTON, CHICAGO.

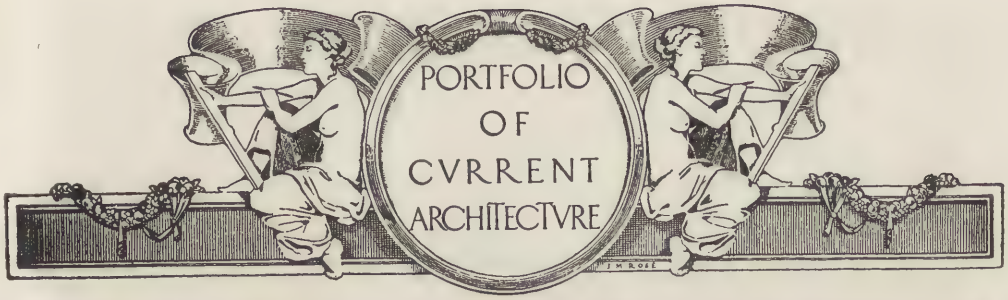
economic reasons. The present building is a good example of what is being done under Gothic influence.

The plan of the building is quite as interesting as is the design. The contractors' room, with a telephone booth and with a clerk in charge offers every facility for contractors who are figuring on work. The waiting room and the public office on the first floor are not partitioned off. The reception room on the main floor is two stories high. On either side of this room and facing the street are the private offices of the members of the firm. On the mezzanine floor are the library and a private drafting room. The library is well adapted for conferences on new designs, which are prepared in the private drafting room. The general drafting room, which occupies the whole upper (second) floor, is a model of lighting arrangement.

The arrangement of the ground floor is very original. The contractors' room is two steps above the sidewalk and there is no excavation below it. The heater room and coal room are nine steps below the entrance hall and five steps below the courtyard and garage, which are slightly lower than the front sidewalk. The paved court provides surface drainage for the driveway and garage and is deep enough to turn a motor car around. The garage has room for two cars, and another may stand under the shelter of the terrace in the rear of the first story. Two dead brick walls of other buildings bound the court on the south and west, and in due time will be covered with climbing vines. That on the west protects the windows from the afternoon sun. The terrace is reached by an outside iron stairway, which is part of the fire escape system on the rear. It is surrounded by a brick parapet wall with flat coping for flower boxes. The waiting room is provided with glass doors giving onto the terrace. Thus every possible provision has been made for convenience and pleasing surroundings. The front windows are all made with steel sashes filled with leaded glass and opening outward. The inside trimming, where wood is used, is of polished oak, with flat finish. Most of the floors are covered with large burned clay tiles.



HOUSE OF MRS. HUNTER P. COOPER, ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.





LOGGIA—HOUSE OF MRS. HUNTER P. COOPER, ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



GARDEN VIEW—HOUSE OF MRS. HUNTER P. COOPER,
ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



PORTICO — HOUSE OF JAMES L. DICKEY, JR., ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.

(The entrance and garden fronts of this house were published at Figs. 31 and 32 in the October issue.)



VIEW INTO HALL--HOUSE OF JAMES L. DICKEY, JR., ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



VIEW INTO LIVING ROOM—HOUSE OF JAMES L. DICKEY JR., ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



MANTEL IN LIVING ROOM—HOUSE OF JAMES L. DICKEY, JR., ESQ., ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



LIVING ROOM—HOUSE OF JAMES L. DICKEY, JR., ESQ.,
ATLANTA, GA. HENTZ, REID & ADLER, ARCHITECTS.



ENTRANCE PORCH - HOUSE OF MRS. J. W. SHINHOLSER, MACON, GA. HENTZ, REID & ADLER, ARCHITECTS.



HOUSE OF MRS. J. W. SHINHOLSER, MACON, GA. HENTZ, REID & ADLER, ARCHITECTS.



OLMSTED MEMORIAL, HARRISBURG, PA. ALBERT KELSEY, ARCHITECT.

"Terraced upon a steep hill, the monument does not explain itself very well in photographs, and until the reaching bronze figure of 'Grief' is added to the base it will not be complete."



OLMSTED MEMORIAL, HARRISBURG, PA. ALBERT KELSEY, ARCHITECT.

"In perspective and seen from the lower level. One can well imagine how a figure with outstretched arms laying a wreath on the shelf below the line of ornament will satisfy the mind and eye."



OLMSTED MEMORIAL, HARRISBURG, PA. ALBERT KELSEY, ARCHITECT.

"The turf-covered ramps gently sweeping down to the level of the burial plot are restful and quiet. Each step is marked by an inconspicuous bronze symbol."





DETAILS OF THE OLMSTED MEMORIAL, HARRISBURG, PA. ALBERT KELSEY, ARCHITECT.

"Note the treatment of the base. The clay model for the bronze symbol shows how the letter 'O' has been suggested; the stems of the lilies are emphasized to bring out the form, which was further accentuated in execution by polishing the oval granite on which the bronze wreath is set."



DETAIL OF THE OLMSTED MEMORIAL, HÁRRISBURG, PA. ALBERT KELSEY, ARCHITECT.

"A comparison of the two plaster studies reveals a totally different treatment of the same motive. The swag has lost its listlessness and the wings have been gradually conventionalized. In the executed work the ribbon has been carried under the festoon, giving unity to the whole design."



THREE BOOKS FOR DRAFTSMEN

By RICHARD F. BACH

Curator, School of Architecture, Columbia University

ASSURED that architectural draftsmanship has fallen from the high place it formerly graced, Mr. Reginald Blomfield, well known to us as a gifted writer upon architectural subjects, has prepared under the title, *Architectural Drawing and Draughtsmen* (large octavo; pp. xii + 96, and 97 pl., unnumbered, printed on both sides of page, Cassell, London; Funk and Wagnalls, N. Y. 1912. $3.60), an all too brief treatise having the aim of encouraging students in the direction of fine draftsmanship chiefly by offering them a comprehensive purview of the finest examples produced by this art in the past. The past, in this case obviously must chiefly be the Renaissance. The author, being an English architect and past president of the Royal Institute of British Architects, has also endeavored to broaden the horizon in particular of the English draftsman who, he finds, has been too prone to ignore the excellent work of Frenchmen and Italians in this province; and if he did grant the great continental draftsmen more than passing attention, he has not seen fit to include in his survey men active in allied fields of design and drawing as were those of the name of Lepautre, of Marot, and others of like calibre. These shortcomings Mr. Blomfield has sought to counteract by a most comprehensive examination of the chosen field as manifested in its continental products.

To be sure, the basis of good draftsmanship must be the study of form and the technical mastery thereof; and the final expression of good draftmanship must be fine drawing, with a modicum of inspiration contributed to the agency of individual character or personal temperament. The author has ably carried through his inspirational purpose, using as a vehicle an excellent and thoroughly readable accompaniment to an extended series of illustrations, themselves representing an admirable selection from the best sources. He offers no technical disquisitions on geometrical drawings, isometric projections, perspective and skiagraphy, but rather attempts in a general way to enlarge the modern (that is to say, in this case, the more specifically English) conception of architectural drawing by tracing its development in the past and by reviewing the workmanship

of great hands, of men who have risen above the ranks of the mere technician not only by their manual dexterity, but by the rarer qualities of selection and insight, and in exalted power of imagination.

In this connection the author indulges his dislike of purely ephemeral aspects of draftsmanship, and his words in this regard should be interesting to all in any way affected by the processes and results of modern architectural drawing: "Fashion has so much to do with current reputation that the only safe standard to judge by is that set by men who have long been recognized by competent judges as past masters of their art. For that, after all, is the only working test. Ingenious writers may find transcendent merit in the work of some long-forgotten artist, and in some rare instances the merit is genuine, particularly in the case of architects whose work is difficult to trace, and whom not only the public but artists themselves are slow to recognize. But the verdict of time is seldom wholly wrong, and students, at any rate in their period of training, will be wise to take as their masters only those artists whose reputation has stood the test of time, and to regard with an open mind, and even suspend judgment on, methods and models that are still in the melting-pot. It is always a difficult problem to assess contemporary progress. There is the danger of mistaking the fancy of the time for a genuine movement, and the scorn with which one may be tempted to regard the work of two or three generations back may recoil on one's own head. . . . A hundred years ago and earlier there were fashions, too; but they were fashions of considerable solidity, changing not year by year, but generation by generation, and the student in mastering the fashion of his generation at any rate mastered one manner fairly completely. Nowadays he is apt to dash from one manner to another, and never arrives at anything. It is essential that the student, in selecting his models for imitation, should fortify his judgment by the study of history and the analysis of old work."

Obviously the object of architectural drawing is the representation of architecture; but this definition must be taken to include a wide field of draftsmanship ranging from the plainest and most practical working drawing made for the purpose of facilitating actual construction to the opposite extreme of such extraordinary visions as Piranesi produced in his memorable Carcere de Invenzione. Architectural drawings must differ of course as to the intention that prompts their making. According to Mr. Blomfield this intention may be either objective or subjective—"that is, the intention of the draftsman may be either to make drawings which can be carried out in the building by other hands exactly as drawn, or, on the other hand, he may wish to produce in somebody else's mind the impression of the building as a whole as he conceives it, or he may employ architectural forms as the symbols and embodiments of some abstract idea, the imagery of a world which never has existed in fact, and never can. Some of the French draftsmen so used them in the seventeenth century, and, in a far more notable manner, Piranesi in the eighteenth. In the first place he will proceed by geometrical drawings; in the second and third by perspective representation, with such accessories as skiagraphy, figure or landscape drawing, and the like, as may be necessary to drive home his ideas."

Geometrical drawings, that is, the practical plans, sections and elevations worked out to scale, have only two essential conditions, namely, accuracy and clarity: the former a matter of knowledge and care, so that the translation of the drawings into materials by a builder, who except for the drawings and the supplementary specifications is entirely ignorant of the designer's intentions, may be correctly effected; the latter which follows logically from the first, so that the drawing may leave no doubt in the spectator's mind as to what it is intended to represent, all tricks and devices being eschewed in the interest of legibility.

On the other hand, the situation is almost reversed when we consider the other function of architectural drawing, namely, that of producing in the mind of another the impression of an architectural

idea. To quote the author: "We are not concerned here with a bare and literal statement of facts. The impression aimed at is a complex one; that is, the draftsman aims at producing the impression not only of certain abstract forms of architecture, but of those forms as a whole, and as a whole considered in relation to its placing on the site, its environment of sky and landscape, and even the intention of the building. All these matters have an important bearing on the value of the design, and their presentation is scarcely less essential than the data given by the working drawings, in the building up of the total impression to be conveyed to another mind. The line that in the geometrical drawing had to be hard and precise now becomes sensitive, even tentative, feeling its way and clinging on to the idea, as it were, in order to suggest it in all its multifarious complexity. Absolute and exhaustive accuracy in detail is less important here than accuracy in the statement as a whole. It may be found, in setting up a perspective of a building according to the strict rules of the art, that the result is disappointing; somehow the building looks different from what had been expected, and if it has been carried out, from what it looks like in fact. The explanation is that it is not only that the eye sees the buildings in perspective, but the brain takes its share in the process. Impressions are formed with lightning rapidity. Knowledge previously acquired comes into play; and unconsciously, because it is done so instantaneously, the mind jumps from what it sees to much that it does not see. The net result left in the mind by the observation of a building is its perspective modified by several other considerations. A draftsman is justified, therefore, in taking these other considerations into account, emphasizing part of the building in one place, modifying it in another; availing himself, in fact, of those principles of selection and restraint and suggestion which every artist has to employ in the statement of his impression. . . . The limits of the architectural draftsman are more closely set than those of the free artist. But within those limits it is more important to convey the main idea than to give a literal and laborious transcript which, in fact, misrepresents the building."

Then we have in addition the use of architectural forms for the expression of abstract ideas. Here we are, of course, on the debatable ground which lies between architectural drawing and the quality of suggestion that falls within the province of the painter. Here again Piranesi remains the most remarkable historic example of an artist who expressed ideas by means of architectural forms.

Mr. Blomfield's book contains but five chapters, so that there are more than nineteen plate illustrations for each. The first section which covers the nature and purpose of architectural drawing and of which we have endeavored to give some suggestion in the preceding, includes also a study of the few medieval drawings which have come down to us; drawings, by the way, inspired by a real conviction which makes them fundamentally true and valuable. The author seems to consider it a matter of good portent for medieval architecture that the great complexity of coördinated office drawings did not exist to hamper its spontaneous growth. He says: "It might be an interesting speculation to consider how far some of the qualities of medieval architecture were due to the absence of organized working drawings; its informality, its habit of improvisation in detail, its irregularities and neglect of symmetry in design. The implicit reliance on drawings in modern practice would certainly account for much of the mechanical quality in modern Gothic. For Gothic architecture was essentially a builders' art; that is to say, its whole scheme and conduct were local, initiated and practiced on the spot, not administered from a distance; and this had one immense advantage: that the designers worked in the concrete, not in the abstract—they saw what they were doing, and could test and alter their programme as the work went along. Our modern Gothic architects have been trained, not in the workshop and on scaffolding, but in architects' offices and schools. They have no means of conveying their ideas

to the builder but through a system of drawing which came into existence for the purpose of a quite different method of design."

In the second section the author deals with architectural draftsmen of the sixteenth century, with due emphasis on Bramante and the San Gallo in Italy, the Du Cerceau and Philibert De L'Orme in France. This is folowed by a chapter on French draftsmen of the seventeenth century such as Le Muet, Jean Lepautre and Daniel Marot and their followers, Le-Blond, Bérain and others. The next section deals with a selected number of Italian draftsmen of the seventeenth and eighteenth centuries, among them Fontana, Bernini, Pierino del Vaga, Algardi, Vasari, and Bibiena, and gives considerable space to the master of them all, the inimitable Piranesi. The concluding chapter deals with English architectural draftsmen, with due attention to Inigo Jones, Sir Christopher Wren, Colin, Campbell, Gandon, Gibbs, Girtin, Nesfield, Waterhouse and others.

There is much in the volume under consideration that will be of value to the practitioner; there is, above all, the inspiration of a great past which has set high the standard of performance in this fascinating field. We can only hope that a subsequent edition will prompt the search for a different paper stock for the plate reproductions. The uniform presentation of all plates upon paper with glazed surface, regardless of the original surface upon which the drawings were made by the artists or designers, tends to limit the effectiveness of what the technician in ink and color calls the values of his drawing.

II.

In his excellent analytical study entitled: *Indication in Architectural Design* (Quarto; pp. 48 and 50 plates. New York: The William T. Comstock Co. 1916. $5), Mr. David Varon has contributed to the drafting room library a volume that may be considered the first really useful text book or practical treatise in the theory of architecture which has seen the light on this side of the Atlantic.

The author's purpose as expressed on the title page of the present work was to reproduce in this book the essentials of a material method of studying architectural design with the help of indication as a means of analysis. To attain this object he has presented within the limit of ten chapters and fifty plates, the latter all reproductions of his own sketches, a graded sequence of lessons from the simplest elements entering into design, through interpretation of mass, silhouette and comprehensive composition, to the solution of the complex problem. The method adopted is fundamentally pedagogical and therefore carries home its point from chapter to chapter in telling manner. By way of example, we will find a section entitled: Design of Elevations Involving Salient Features. This discusses in detail the various methods of treatment of a single dominant feature as the sole accent or as abetted by other flanking motives. In illustration of the discussion in this chapter sketches on no less than four plates are referred to the latter, presenting in each case a series of historic examples boldly but very expressively indicated. This chapter and these plates are but steps in the progress of text and illustration material, each of which is carefully constructed as an organic series development.

The spirit of the title of the book has been carefully maintained throughout; each plate is itself built up organically whether dealing with elevation or plan or perspective. There is no lack of technical achievement, for, as has been ably said, such achievement in indication is tantamount to an exact appreciation of just how much may be left out of a drawing. The plates as a series are so instructive that with the meagre accompaniment of explanatory text, which for each illustration appears on the back of the preceding one, the series of illustrations could themselves be used as an effective text book. In fact we can picture the usefulness of Mr. Varon's plates as the basis of a series of lectures which might be delivered by the patron to his students or by the architect to his draftsmen. It might be a thoroughly available suggestion that certain of these plates

be hung up in the drafting room by way of suggestion to learners so that the latter may establish in their own minds the reasonably analytic mode of approach which has been the success of Mr. Varon's volume. In fact the man long in practice will find in these pages systematically set down those guiding truths which he has discovered for himself by dint of much study and experiment, but which can be firmly fixed in the mind and given an illuminating focus by the logical presentation of ideas for which architectural indication is a thoroughly available means; what is more, Mr. Varon has been especially qualified, through having had the advantage of the inestimably valuable instruction of Guadet and Paulin. Wherever there are ambitious draftsmen this volume will find a haven, for it has long been wanted and it will promptly constitute itself a most valuable *vade mecum* for students of architecture everywhere.

III.

An eminently efficient and handy volume for the busy drafting table is Dewitt Clinton Pond's *Engineering for Architects* (Crown Octavo, pp. viii + 104. New York: The Columbia University Press, 1915. $2). It is well known that architects regularly encounter problems in structural engineering that lend themselves to solution with no greater aid than that of simple mathematics and the type of hand book published by one of the leading steel manufacturing plants; but nevertheless occasional problems present themselves for which there is no generally known method of attack and, as a result, reliance must be placed upon a qualified engineer or else the risk of possible failure of the structure must be faced.

Not infrequently ignorance of the supporting strength of structural members is the reason for unnecessary cost. Mr. Pond aims to obviate these various difficulties by providing the necessary and useful information in his brief discussion, with no pretence at the introduction of any new methods of calculation and with no suggestion that there are no other methods beyond those he cites. The information given will facilitate the design of floor beams, girders, column sections, grillage beams, and simple roof trusses. The subject matter is covered in twelve terse chapters with ample diagrams, calculations, tables, etc.

Not the least important office which this handy volume will accomplish is that of reducing the mystery which for many a practitioner enshrouds such essentially plain subjects as the sizes of beams and the column sections necessary for structural purposes under stated conditions.



Professor H. Langford Warren.

When Professor H. Langford Warren died last July at the age of sixty years, American architectural education lost one of its finest personalities. Professor Warren's lifework was twofold. He was the founder and organizer of the School of Architecture of Harvard University, which he developed into one of our chief schools and of which he was the head for twenty years. But perhaps an even greater achievement was his brilliant teaching of the history of architecture. It is not exaggerating to say that nothing surpassed it in any school in the world. At the Ecole des Beaux-Arts, where the ablest teaching in architecture is to be found, the history of architecture excites no profound interest in either teachers or students. The reason for the perfunctory attitude at Paris Professor Warren himself understood perfectly when he pointed out in an Institute debate that modern French architecture, with all its faults and limitations, is the only living style of architecture in the world today (though since he made this statement certain phases of German modernism may claim recognition). Therefore, since they have a style of their own, Frenchmen do not have to search history to borrow and to assimilate. They may pick up their art forms as they learn to design. But for other peoples, especially for Americans who are condemned to work in an eclectic method, the thorough study of the history of architecture is a necessity. This necessity Professor Warren knew profoundly how to provide.

In his teaching, the experience of a practising architect made real and mellowed the research of the scholar. Indeed, it might be said of him that he was an architect who at the same time happened to be a scholar. He is to be counted among the few pioneers who lifted art-criticism out of the bog of archeology and literary snobbery where it floundered during the nineteenth century.

Like many men who come to distinction in the United States, Professor Warren had the benefit of a wide experience that helped him greatly when he finally found his lifework. He was born March 29, 1857, in Manchester, England, where he spent his early boyhood. Later his father lived in Germany during 1869-71, and the son gained part of his education in the gymnasia of Gotha and of Dresden. Afterward he returned to England to attend Manchester College for three years. After drafting in a Manchester office, he moved with his family to this country, where he came under the influence of Charles Eliot Norton. In 1877-78-79, young Warren studied at the Massachusetts Institute of Technology; then he spent several years in the office of H. H. Richardson at a time when it was a training school for a band of exceptional young architects—among them Stanford White—who became leaders in the profession. Thereafter Mr. Warren practised, principally in Boston, in a partnership which he continued throughout most of his life.

It will be readily understood that when, in 1893, the architect Warren was called to Harvard he brought to the professor's chair (he became a full professor six years later) a ripened judgment, an imaginative insight into the problems of design and of construction that practice in the profession best gives to a critic of architecture.

Professor Warren's work at Harvard was in a sense a struggle. He began to establish his school when French influence—French influence so-called—was sweeping over the profession, spread by a stream of returning enthusiasts from Paris. That took place twenty years ago and the results are to be seen in the buildings of that time. The Paris missionaries would brook

no compromise; they wanted America to adopt not only French teaching but French art-forms as well. Some practising architects resisted the movement, among them Mr. McKim, already well on his career as the greatest architect of the English-speaking race, the greatest at any rate since Christopher Wren; Mr. Platt in New York, some architects of houses in Philadelphia like Mr. Eyre and Mr. Day, and in Boston like Mr. Bigelow. The work of such men could be tolerated, for it was too important to be decried successfully, but the Paris faction thought it presumptuous for any school to teach anything but the style of the Beaux-Arts. This all seems trivial today, but the public hardly realizes that only fifteen years ago it required great courage to hold out for the principles that are commonplace now. We may be thankful that Professor Warren lived to see the vindication of many of his ideas. Think of it! In some quarters he was chided not only for appreciating Colonial architecture, but for teaching it in design problems.

For a time Professor Warren went almost too far in opposition to the French propaganda. He was not primarily a teacher of design, and in his anxiety to instill appreciation of fine taste in the students, he sometimes discouraged initiative and imagination in planning by insisting on conscientious care in details of motive and ornament. But as his opponents grew less fervent in their worship of French taste, Professor Warren became broader in his attitude toward the design policy of the Harvard school. At the same time the work of McKim and of the others noted above was beginning to tell. Almost suddenly the attitude of the architectural world shifted over. It was agreed that America should adopt the sound and inspiring methods of Parisian teaching, but that she must develop her own traditions of good taste in architecture. Then Professor Warren made a brilliant move. He succeeded in bringing to the United States Professor Armand Duquesne, one of the soundest teachers of the Ecole des Beaux-Arts in theory and one of the ablest in planning, whose mind works almost mathematically in the solution of architectural problems. He was the first winner of the Grand Prix de Rome to come over to the United States to teach. Unfortunately, after two years here the war called him back to France. By this time the school had won the backing of some of the ablest members of the profession, and Professor Warren felt that even McKim himself would have come to Cambridge to teach if it had been more accessible from New York.

Professor Warren performed a further valuable work, though one not so well known. This was his teaching of the abstract theory of architecture as distinct both from history and design by specific problems. His history was replete, in a vital way, with criticism and with illustrations of principles of architectural design, but he felt the need of a short series of lectures on the philosophy of beauty in architecture. Professor Warren had become impressed with the remarkable presentation of the principles of design in the arts formulated by Dr. Denman W. Ross in the Department of Fine Arts in Harvard College, whose brilliant analysis of the subject is only just being accepted. These general principles of design in the decorative arts Professor Warren applied specifically to architecture, with additional exposition of the kind of beauty which is a function of utility in architecture. Or, in other words, architecture is a useful art, and in addition to the beauty that may lie in its forms, it may have a further beauty that comes from the expression artistically of use and of construction. These lectures were extraordinary for insight, sympathy and clarity. They are to be compared to the best French expositions of theory. Indeed, students who went to Paris for further study in architecture found that they were grounded in the same principles that the art-teaching there set forth, if allowance be only made for differences in individual personality and for the more imaginative French ideal.

The above fragmentary account of his organization of the school will aid in understanding Professor Warren's greatest work—the teaching of the history of architecture. His course ran through three years, though later it was shortened to two years, and covered the architecture of antiquity, of the Middle Ages beginning with Christian Roman architecture, and also Renaissance and modern architecture. In these lectures the viewpoint was somewhat different from his other method of almost mathematical analysis—the forms and construction of architecture were presented as the expression of the civilizations that produced and developed them. From these lectures the student went away impressed with the profound truth that architecture, and indeed any art, is an exact symbol, a perfect mirror of the life of the people cre-

ating it. Misled by literary sentimentalism, until recently art has been considered rather as the effort of exotic individuals. I suppose that law school students issue from the instruction in the case system holding much the same attitude toward law. It is not to be supposed, however, that Professor Warren consciously tried to introduce legal methods of instruction into the teaching of art. If anything, he probably felt he was only making use of the laboratory methods of pedagogy. At any rate, so thorough was his scholarship that one derived as clear an idea of the history of man in political, economic and intellectual fields as he might gain from much instruction in "pure" history; and with perhaps a clearer conception of the personality of the great peoples of the world as visualized in their art than he might derive from any source whatever. Under such inspiration architectural criticism became almost a science, so unerring were the judgments—judgments not forced on the class, but which the class seemed to form of its own accord, so surely and inevitably was the progress from facts to conclusions. Nevertheless, neither the pedantic nor the bookish were present in this method. Here, no doubt, the artist and the practising architect in the teacher saved the situation. There was nothing of the archeologist—art-dissector—about Professor Warren. He understood the value of archeology in research, but he felt it to be a different field from art criticism.

Unlike most critics, Professor Warren had no antipathies toward any one style of architecture. Although he was one of a few among his contemporaries who understood Gothic, and one of a handful who could teach it, he was not blind to merits of classic or of Renaissance architecture. He comprehended fully the charges that are brought against these styles, and was unsparing in pointing out defects; but his logical and sympathetic mind knew exactly where to stop. In the bitter controversy between the classic and the medieval his position was this: the early Renaissance work in Florence and other cities of North Italy—the product of the creative art-guilds—was entirely to be admired; and in the "High" Renaissance the work of Raphael in the sketches for St. Peter's, especially in the uncompleted Villa Madama, and, to an even greater extent, the creations of Baldassare Peruzzi, promised achievements as noble as any of the other architectural styles; but that the spirit of ostentation and of the grandiose developed in Renaissance Rome crystallized the impulse into mechanical and arbitrary forms. Architecture degenerated into formulae that first deadened, then debased the style into Rococo extravagances.

Towards Roman architecture Prof. Warren's attitude was equally discriminating. He appreciated the worth of Roman discoveries of construction, especially the construction of vaults, and of the Roman capacity to plan on an immense scale; but he also demonstrated that the Romans borrowed most of their art-forms from Hellenic Greece. Thus he accomplished the paradox of taking away from the Romans what little credit some of their hostile critics allowed them, yet of leaving them with more credit than most of their admirers claimed for them. Hence his epigram in the same Institute debate alluded to above, in which he summed up a large part of the architecture we use. Speaking of the worst aspects of Renaissance architecture, he called it "the reflection of a reflection of a reflection" — Renaissance Rome, ancient Rome, Hellenic Greece, Greece. And he might have added another "reflection" for some of the architecture of twentieth century America.

His powers of literary expression were unusual. At the end of the year he wound up his lecture course on antiquity with a description of Rome in the zenith of its architectural glory that was so dramatic, so imaginative, and so sound architecturally, that his class of lecture-toughened Harvard undergraduates burst into long spontaneous applause. It was a tribute also to the man himself, to his fervid, tireless effort to advance his school in the cause of fine architecture. It was a tribute besides to a gentleman of the noblest impulses, holding the most generous feeling towards his students with whom he put himself into intimate contact. Professor Warren was one of that brilliant galaxy of Harvard teachers which has been so dimmed by death recently. It was his work to found at Harvard in company with Norton, Moore and Ross a really great tradition of art-study and appreciation, a tradition not without influence in civilizing the instincts of American life. Charles Eliot Norton founded the tradition on a literary basis and Dr. Denman Ross and Professor Warren transferred it to an artistic basis where it properly belongs. Each according to his time; if Norton had not held the viewpoint of a literary man it is doubtful whether he

could have made art respectable to the puritan-victorian intellectualism of America. It is to be regretted that, alone of the four, Professor Warren did not live to combine his extraordinary lectures into books, for he could have produced, in several volumes, an architectural history of the various styles that should have been the standard for both architects and scholars.

JOHN TAYLOR BOYD, JR.

Old Windmills of the South Side of Long Island.

Had Don Quixote ridden abroad to battle with windmills during the later part of the Colonial period of American architecture, he would have been challenged by many wind revolving arms as he urged his steed along the country road that skirts the sea on the south side of Long Island. The picturesque wheels and broad fans are at rest now and have no call either to grind the grain of the countryside or to challenge the chance knight-errant, but they do challenge the attention of every lover of the picturesque and unusual in the art of building.

Beginning as the traveler crosses the bridged canal that would rightfully make



MILL AT HAMPTON, L. I.



MILL AT HAMPTON, L. I.

the old name of Canoe Place obsolete, and journeys among the rolling Shinnecock Hills, the first of a series of these novel structures appears. Through beautifully developed Southampton, Bridgehampton and Easthampton, the road frequently passes in view of one of these odd structures; and even at Water Mill, where there is water power enough to turn the millstones, sufficient of a departure from the ordinary to give the village its name, a sturdy wooden fan gives the wind a chance to aid or compete with its sister element, the water.

These early windmills are in most every case free standing structures, octagonal or circular in plan, of modest diameters but of sufficient height to afford the clear sweep of the oftentimes thirty-foot fans, and also to reach an elevation that has an unbroken breeze. In order further to facilitate plenty of wind for motive power, the mills were usually placed on high ground, on the knoll of a hill or beside a clear sweep of water, sites that naturally add to the picturesqueness of any building and render it a conspicuous landmark.

As to the construction of these mills, frameworks of roughly hewn, oaken timbers are found to be fastened together by tenon and mortise and wooden pegs, in





OLD WIND MILLS ON THE SOUTH SHORE OF LONG ISLAND.

the use of which the early builders were most adept. Great hand-whittled shingles, often some ten inches to the weather, form a covering of softest grays. The openings are small and but to lighten the tiny stairway or close relative to a ladder that turns and twines up to the top. The roofs of these old mills must have offered a specially difficult problem for the early carpenter, but the problem was solved by him in the most direct manner, and nothing could be more effective than the graceful lines of the shingled caps that crown the structures.

The mills being operated by the power of the wind acting upon oblique vanes or sails which radiate from a horizontal shaft, their four great arms are the most prominent feature of a prominent figure, and give a certain jauntiness of character like the gay waving feather stuck in the cap of an otherwise sombrely garbed peasant of most prosaic mien. The weight of these extending arms would have threatened the stability of the structure if the builders had not sought for equilibrium by inclining the upright timbers of the building proper, giving it the form of a much elongated truncated cone or pyramid. This purely structural precaution produced an effect most subtle, even though perhaps only by chance was the refinement and nicety of line obtained.

Time and nature have been charmingly artistic decorators of these old buildings. The shingles are stained by many bleak storms right off the raging Atlantic. The dull green moss and clinging ivy and clambering woodbine have each added their touches of embellishment. No wonder that the charm and picturesqueness of these old mills have claimed their exemption from destruction and made them favorite haunts as studios and craft shops. They also may have served as a suggestion for that rather common towerlike motive that is often seen in the many pretentious summer mansions that crowd these lovely seashore towns. It may safely be assumed that they have inspired many perspective builders in this section and never fail to be a source of pleasure to all seekers of the quaintly beautiful in building.

RALPH S. FANNING.

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